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ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2149

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INTERNATIONAL AFFAIRS

BRIEFS

ROMANIAN-BULGARIAN COMMISSION SESSION--The 25th session of the Romanian-Bulgarian Subcommittee for Scientific-Technical Cooperation was held in Bucharest. [date not given] The commission examined the implementation of decisions adopted at the preceding session. New cooperation targets and ventures were established for the 1981-85 period, especially in the areas of new energy resources, machine-building, forestry and construction materials, chemical and metallurgical industries, electronics and electrical engineering, and light industry. [Bucharest Domestic Service in Romanian 1500 GMT 29 May 81 AU]

CSO: 2700/297

INADEQUATE MONITORING OF IMPLEMENTATION OF TASKS IN ECONOMY

Tirana BASHKIMI in Albanian 21 Dec 80 p 1

[Editorial: "For a Broader Understanding of Control of Decision and Task Implementation"]

[Text] Reinforcement of the monitoring of the implementation of decisions by state and economic organs is achieved by taking it to the masses and attracting the broadest thinking of the masses. This is an important task which derives from our socialist democrach in action. In practice, however, despite the work done, cases of intellectualist concepts are noted which keep the control groups pinned down in the office working with documents and they do not take the time needed to consult with the workers and cooperative members. The concepts that "We are aware of the problems," and "What more can these workers tell us than have the administrative workers," are dubious and put control within the framework of bureaucratism and liberalism and therefore a bitter struggle must be waged against them.

The fundamental demand to strengthen state control is the enhancement of its effectiveness to prevent shortcomings, violations and distortions of the implementation of decisions and directives. In this regard, a rich practical and methodical experience exists which constitutes a sound basis of study and generalization for enhancing the monitoring of the implementation of decisions. Experience shows that where systematic controls and intensive recontrols have been applied and where the information system has been evaluated better, there is more struggle and effort for implementing decisions and directives, the work goes better and economic tasks are accomplished. However, besides this fine experience, shortcomings and deficiencies exist which testify to the inadequate effectiveness of the monitoring of decision implementation.

The weaknesses and shortcomings in monitoring the implementation of tasks and decisions should be sought in the weaknesses and shortcomings in the work method of the pertinent state organs. For example: it is the lack of a profound control by the Executive Committee of the Kukes District People's Council which has permitted repeated shortcomings and deficiencies in the development of this district's livestock sector and, as a consequence, the cost of a kilogram of milk at several agricultural units has

risen considerably. When the factors which have been influential are analyzed through a more intensive monitoring, their influence becomes apparent, such as failure to achieve milk productivity and the number of head of cattle, the lack of feed and fictitious accounting of expenses for the food base. The shortcomings are completely avoidable, but it is necessary for the monitoring of decision implementation by the pertinent state organs to analyze these phenomena more deeply, to find the reason for them and to specify measures and tasks for improving the situation.

In daily practice we also come across erroneous ideas which reduce the monitoring of decision implementation among certain cadres who are "more highly specialized" and assigned to this job, such as reviewers, various inspectors, quality controllers, etc. This is also the source of the erroneous concept to simplify the content of control to a simple financial monitoring and review. No less harmful are the concepts that "monitoring is an easy job; we know the problems and deal with them daily," etc. These erroneous concepts and practices, to the extent that they exist, should be attacked constantly by every state and economic organ.

The monitoring of decision and task implementation should be considered an integral part of each worker's functional duty. Due to the gaps which exist in this direction, there are occasions in various economic areas when analyses of the work are not based on intensive controls and, as a consequence, the call for an audit is not made as it should, leaving the way clear for displays of liberalism in following the implementation of decisions, responsibility is not properly fixed and deficiencies recur to the detriment of the work. In quite a few controls instituted by departments and executive committees of district people's councils, the discovery of phenomena alone has been sufficient, without pausing to analyze the causes and to establish the way to emerge from backwardness. In other cases, since the necessary effort has not been made to prepare for implementing controls, problems have been treated superficially, lacking analysis and frankness with the specific directive or task. Both of these tendencies, in certain instances, have dulled the realizable force and effectiveness of economic control, negative phenomena have not been argued out, responsibility has not been defined clearly and, therefore, its help is not as noticeable as it should be. Can the Directorate of Food of the Ministry of Light Industry and Food Industry be considered as having conducted in-depth monitoring when it dispatched a team to six districts (Fier, Lushnje, Tepelene, Gjirokaster, Permet and Sarande) over a 5-day period to monitor such problems as the readiness of canning lines, the quality of bread, the utilization of machinery, the problems of using energy resources, the readiness of light units, the implementation of production plan tasks, etc. Certainly, following such a practice also causes the controls of departments at the grassroots, in a number of cases, not to yield the desired effect. Therefore, the enterprises and sections of executive committees occasionally complain about inadequate assistance which the departments at the grassroots level provide. We think this matter should be analyzed by each department and the necessary conclusions reached to raise the level of control and assistance at the lowest levels.

There is no other explanation than the absence of a profound control and frankness with the respective decisions of the Council of Ministers regarding energy which has permitted certain consumers to damage and misuse coal; the lack of control and repair of several boilers of enterprises of the light industry and food industry and in construction causes the fuel not to burn completely in them; due to the lack of repair and insulation of the network, a quantity of steam is lost and the condensation is not completely returned from the consumers to the boilers. It has been established that vehicles which transport coal should have raised sides and tarpulin covers, while in fact there are shortcomings in implementing this since the idea exists that "coal is neither lost nor damaged."

The elimination of these shortcomings in the field of monitoring the implementation of tasks in the economy is fully possible by virtue of a higher assessment of it by each state and economic organ. An essential condition for the accomplishment of this important task is awareness of directives, decisions and laws by all workers who engage in monitoring activities, and a factor with the greatest effect on increasing the quality of monitoring is the accomplishment of a sounder professional preparedness along with the intensification of the effort to improve monitoring methods.

5658
CSO: 2100/41

SHORTCOMINGS IN COMMUNAL SERVICES REVEALED

Tirana ZERI I POPULLIT in Albanian 11 Dec 80 p 1

[Editorial: "More and Better Quality Communal Services for the People"]

[Text] The party has given and devotes much importance to the development of the communal economy and all of its service sectors since this is a field that deals directly with the life of the working masses. During this soon-to-end 5-year period, the communal economy's advances have been great and evident in every sector of life. Many types of services have been increased and extended more widely, service culture has been enhanced and organization of the work has been improved. These and other achievements are indisputable. However, comparisons should be made not only with the past, nor mostly with it, but first and foremost with the current needs of the people and how they are being met.

The April 1980 decision of the Council of Ministers cites new measures and tasks for the further strengthening and faster development of this sector of our economy for the coming 5-year period and beyond.

The organizational strengthening of enterprises, the expansion of sectors and types of services and their quality improvement today constitute the gamut of great problems whose timely solution will enable the work in the communal sector to advance to it might better meet the growing needs of the people. The task is to expand services, to open new sectors and other new locales in order that the growth of these services will be several times greater than the population growth. The attainment of set goals requires a greater effort, fuller organizational, planning and control measures, to put the communal economy in its rightful place with the other sectors of the economy. The Ministry of Communal Economy, the pertinent sections on the executive committees of district people's councils, enterprise directorates, people's councils of united villages and the heads of agricultural cooperatives all have specific tasks in this regard. A radical change is called for in this sector's work so it might provide the entire array of services which the people need, in quantity and quality and without delay.

The improvement of services is connected, first of all, with the formation of a more accurate and fuller understanding of tasks by the workers in this sector. A fine effort has been made toward worker education and qualification and toward strengthening enterprise management, but considerable shortcomings are also evident, stemming from the fact that the thinking about services is yet incomplete. Such shallow ideas exist that the activity of a communal enterprise is measured against the plan only "in loka," i.e., globally. By such an attitude and evaluation, certain enterprise managers, while having the duty to provide many services and to carry them out quickly and with quality, follow the plan in general, without analysis and specific measures for the types of services provided and their quality.

There is no control over the quality of services in certain sectors of communal enterprises in Tirana, Shkoder, Elbasan, Durrës, Vlorë, Korçe, Lezhë, etc. There are services, such as those for the repair of clothing, shoes and other personal items, and home services which are not at the extent needed and are performed with delay and poor quality. Quite a few citizens who patronize the service stores do not have their work finished due to carelessness on the part of service personnel, who either give them the run-around, delaying them, or treat them poorly. Nevertheless, on some occasions, the managers of sectors and enterprises fail to draw conclusions about the cause of these deficiencies since the erroneous idea that "shortcomings are bound to exist in the services we perform," takes its toll.

Starting this year, it has been ordered that a number of workshops would be established and organized in Tirana, Shkoder and certain other cities. The year is ending and the workshops are not opening. The executive committees of district people's councils and the Ministry of Communal Economy should not permit such a situation to exist. The organizational measures which have been taken, such as increasing the table of organization, the creation of new enterprises (by converting activities from other departments or by dividing existing communal enterprises) should have a faster and stronger influence on the improvement of services. This is achieved, among other ways, by organizing workshops where they are essential. Some things here involve new investments which should be resolved through planning. However, there are quite a few which are obstructed by baseless causes. Thus, in nearly every city we encounter cases where the ground floors of new buildings are left vacant for a very long time, either because the executive committees have not decided what they will be used for, or else the decision has been made but its implementation is dragged out for months by the management of communal enterprises. This situation should not be permitted.

Important tasks are arranged for the expansion and improvement of services in rural areas. Attention here will be concentrated on strengthening plan discipline, above all, for supplying the communal sectors which function in the rural areas. The plans are very often carried out deficiently and some enterprises doing the worst in this area are those which produce construction materials. The rural area, besides its own production, has become a consumer of many industrial materials, such as bricks and tile, cement and building materials. In many areas, contracts are not implemented and, as a result, building maintenance is hindered.

As every other sector, the communal economy needs various materials which are obtained in specific ways: by plans and by contracts. In this field, such deficiencies exist as: the proper methods for calculating enterprises' needs are not being applied in sectors of the communal economy because management does not compile full and accurate accounts. Even when accounts are drawn up correctly for certain materials, in quite a few cases, they are short-filled, as happens with tile and such building material as lumber, etc. However, certain of the materials which this sector has, instead of being used for service to the people, go to repair institutions and similar elements and, as such, outside its main destination. It is essential that such shortcomings and bad practices as these be eliminated quickly because they are directly related to the tasks specified for the radical improvement of services for the people.

Worker qualification remains a great unresolved problem. Few have registered in courses and schools and at the end of the course or school many others drop out. However, the quality of the course development is also unsatisfactory. All of this affects the quality of service. Not being fully implemented is the orientation that the worker in this sector should master multiple professions and that as many types of services possible should be provided at locales with few workers. Failure to implement this task causes a restriction of services at a time when they should be expanded.

The party committees and their forums in the districts have increased their interest in the communal economy. They have opened the horizons for the basic party organizations and their instruments in this sector. However, it is necessary that they put the executive committees, enterprise management, and all party instruments in motion with the goal of achieving as soon as possible the change which the party seeks so that services will increase and improve in quality.

5658

CSO: 2100/40

ALBANIA

BRIEFS

GREEK COMMERCE DELEGATION--Tirana, 21 Jun (ATA)--A delegation of the Chamber of Commerce and Industry of Athens, led by its president, Liasaros Efremoglu arrived in our country. It was received in Tirana by the chairman of the Chamber of Commerce of the PSR of Albania, Nikolla Profti and others. On its way to Tirana the delegation visited industrial and cultural centers in the city of Gjirokastra as well as the Dervican sector of the Grapsh higher-type agricultural cooperative in Gjirokastra District. The chairman of the Executive Committee of the Gjirokastra District People's Council, Resul Zani, received the Greek delegation and gave a dinner in its honour. (Text)
[AU211415 Tirana ATA in English 0900 GMT 21 Jun 81 AU]

CSG: 2020/51

NATION'S ECONOMIC INTENSITY DISCUSSED

Sofia ECONOMIC NEWS OF BULGARIA in English No 4, 1981 pp 1,1

[Article by Eng. Ivan Tenov, deputy minister of Electronic and Electrical Engineering]

[Cont.]

The setting up and subsequent growth of the electronics industry in our country is the result of a consistent policy of rapid development of the national economy through the introduction of the latest achievements of science and technology. Research and development establishments and facilities for the production of computer and communication equipment, instruments, automation devices and micro-electronic hardware appeared within a comparatively short time.

During the Seventh Five Year Plan (1976-1980) the production of computer hardware grew rapidly, marking a 2-fold increase over 1975. Bulgaria began specializing in the production of external memory units and magnetic disk packs for computers. New remote data-processing devices, special processors, etc., were developed. The production of communication systems and devices and of new electronic products was launched. Quasielectronic telephone exchanges with microprocessor control and communication lines incorporating multiple and radio-relay devices were created. The production of automation devices is expanding. New microelectronic and other construction elements were introduced. The introduction of microprocessor integrated circuits has made possible the production of electronic gear on the basis of microprocessors.

During the Seventh Five Year Plan our electronics industry updated and greatly expanded its production list. Every year about 20 per cent of its products are new or improved models.

All this has made possible a sharp increase in the export of electronic engineering products on the world markets.

Special attention has been devoted in recent years to the advancement of microelectronics as a key sector of electronics. The task was set for a gradual transition from the production of separate items to the manufacture of complete electronic or electrified systems. This has faced Bulgarian electronics with new goals in view of the intellectualization of production. The attainment of these goals underlies the planned growth of our country's electronics industry during the Eighth Five Year Plan and up to 1990.

In keeping with the world tendencies in the electronics industry, Bulgaria's participation in the economic integration between the socialist countries, and the experience accumulated so far, during the Eighth Five Year Plan and in the years up to 1990 Bulgarian electronics will encompass the production of highly intelligent systems and devices in a number of key areas.

We shall expand our activities in the field of centralized systems with particular emphasis on computer systems and systems for the control of individual machines and sets of machines.

Qualitative changes are envisaged in the "intelligence" of the centralized systems through the rapid development of base and applied security.

We shall start development and introduction of integrated numerical systems in close cooperation with the Soviet Union and the other socialist countries. It will encompass numerical carrying equipment for certain levels of integrated systems, communication devices for numerical information flows and software.

Integrated administrative systems with the necessary comprehensive applied programme security will develop rapidly.

The development and production of distributed numerical control systems in our country will be oriented towards the satisfaction of some needs of systems for the control of continuous production processes, discrete manufactures and territorially decentralized facilities (telemechanics).

Peripheral system devices will be used mainly for ensuring the production of items in which our country specializes.

The production of individual effective products with which Bulgaria participates in the international division of labour will be extended and updated.

Closer integration with the Soviet Union and the other socialist countries is a decisive condition for the further advancement of Bulgaria's electronics industry. A number of cooperation programmes have been signed between this country's Ministry of Electronic and Electrical Engineering and Soviet ministries in implementation of the General Specialization and Cooperation Scheme between Bulgaria and the Soviet Union which covers the period up to 1990. These programmes encompass such key areas as computer and communication equipment, automation devices, etc.

New forms of cooperation including the setting up of joint research and development teams, joint institutes, etc. are envisaged as part of the implementation of these programmes.

Bulgaria's specialization in the field of computer technology will be deepened on a bilateral and multilateral basis. We also plan to specialize in the development and production of numerical commutation and carrying systems and other advanced types of communication equipment.

We shall expand our cooperation and joint production ventures with a number of leading firms in the field of electronics. Special attention will be allotted to such areas as the automation of machine-building, a field in which we have been working very actively in collaboration with Japan's Fujitsu Fomac company, household radioelectronics, construction elements, etc.

COOPERATION WITH USSR AT NEW STAGE

Sofia ECONOMIC NEWS OF BULGARIA in English No 4, 1981 p. 6

[Text]

A determining factor of promoting trade between the USSR and the PR of Bulgaria has been the tendency to make machines and equipment a leading commodity chapter in two-way deliveries, which determine the dynamism of trade as a whole.

In 1981-1985 further expansion is foreseen of the share of machinery and equipment in two-way supplies; its relative weight is to exceed 40 per cent. At the same time more advanced machines, instruments and equipment will be the object of deliveries.

Planned and long-term mutually profitable teamwork has become part and parcel of economic relations between our two countries and it is characterised by an increasing intensification of integration processes based on industrial specialisation and cooperation.

Between 1981 and 1985 it is hoped that more than 60 multilateral and 30 bilateral agreements will be concluded on specialised and co-ordinated Bulgarian-Soviet product projects.

Practically all economic organisations of our two countries have been included in the integration processes. The trend has intensified following the signing of a Commercial Scheme in September 1979 on specialisation and cooperation between the USSR and Bulgaria in material production until 1990.

The long-term Programme of all-round joint work is the vehicle which enables relations between the chambers of commerce and industry of the two countries to make headway. Last January 14 a

long-term programme and a plan of undertakings during 1981 were signed in Moscow. For the current year the two chambers envisage a host of undertakings to expand and deepen bilateral relations, both commercial-economic and techno-scientific ones. The chambers are planning active exchange of information between Soviet and Bulgarian industrial enterprises on matters of specialisation and cooperation of production, and the bringing in of new technologies which involve closer contact between allied enterprises, members of the chambers of commerce and industry.

With the help of the Soviet Chamber of Commerce and Industry, Bulgarian foreign-trade organisations and associations will participate in 20 exhibitions and other events held on the territory of the USSR.

The latest models of Bulgarian-manufactured goods will be made familiar to the public in Moscow, Leningrad, Minsk, Kalinin, Ryazan, Novosibirsk, Alma Ata, Volgograd, etc. Bulgarian Economic Day will be held in Tbilisi and Erevan. In its turn the BCCI will lend help to the Soviet foreign-trade organisations when they take part in the spring and autumn International Plovdiv Fair, the World Hunting Exposition and other events.

The Commodity Control Board of the Soviet Chamber and Bulgaria-kontrols at the BCCI will continue working to improve last season's already commendable practice of receiving and handing over the goods carried over by ferryboat between Varna and Il'yichovsk.

The overall prospects of Soviet-Bulgarian economic cooperation

could be illustrated with the results of the past five-year plan. In 1976-1980 the average growth rate of our trade has been quite high - 5.2 per cent a trade growth rate which runs faster than the material production growth rates of the two countries.

In the current year the two chambers will pay particular attention to helping the national groups expand teamwork in the protection of industrial property, in arbitration, etc.

In 1976-1980 Soviet-Bulgarian trade reached 29,000 million Roubles worth, more than twice the trade figures for 1971-1975. In actual fact both trade in that period and trade during the past five-year plan exceeded the figures set by the long-term trading agreements between the two countries.

Soviet-Bulgarian economic ties are noted for their dynamism and durability. They are an example of mutually profitable and effective collaboration between the two countries, widely differing in population and in the size of their internal markets.

Nikolai GOLISSEV
- Representative
of the Soviet
Chamber of Commerce
and Industry
in Bulgaria

Aleksandr SOKOL
- Head of the
Economic Department
of the Soviet

Commercial
Representation
in the
PR of Bulgaria

USSR, BULGARIAN COMMUNICATIONS AGREEMENT

Sofia ECONOMIC NEWS OF BULGARIA in English No 4, 1981 p 3

(Text)

The Soviet and Bulgarian communication ministers V Shumshin and P Vanchev recently signed a programme of promoting teamwork in their sector until 1990. This was a very promising step in the spirit of the General Soviet-Bulgarian Specialisation and Cooperation Scheme adopted in the field of material production.

For the first time a joint college of experts in Moscow discussed the guidelines of cooperation in communications over the coming ten years. On a world scale, this period is expected to mark a most rapid advance in long-distance communications and the renewal and re-equipment of technical facilities.

The two ministers of communications signed documents whose points are already being implemented. Soviet experts work in Sofia on the problems of cable line construction, the introduction of new communication equipment, on harnessing satellite links and automating and mechanising postal services.

Under a protocol on promoting joint work in technical and postal communications, work has started on drafting and subsequently

building a new cable trunk line between the USSR and Bulgaria, which will make direct links easier. Currently work is proceeding on developing a data-communication system which is certain to open new opportunities before the other sector ministries for the exchange of information. This will help to improve the organisation of the economy in Bulgaria, the USSR and the CMEA as a whole.

A new international telephone and cable exchange is under construction in Sofia. It will link the capital with the district centres and all five continents.

Soviet experts will help in perfecting the performance of a Bulgarian space station included in the INTERSPUTNIK network.

The introduction of 'electronic post' will modernise the service.

By pooling efforts with the USSR and the other socialist countries, Bulgaria will be able to solve many cardinal problems, like the transition from the analog to the numerical communication equipment, the coming into operation of electronic exchanges, space TV, optical cables, and automation of the processes of postal communications and the distribution of the press.

COOPERATION WITH FRG EXPECTED TO REMAIN HIGH

Sofia ECONOMIC NEWS OF BULGARIA in English No 4, 1981 p 7

[Article by Anna Draganova]

[Text]

The West German Economy's Eastern Committee is a general organ of the economy of the Federal Republic, its purpose is to promote trade with the socialist states. Six working sectors operate within the Committee, with one sector for Bulgaria set up since 1972.

A delegation of the Eastern Committee led by its chairman Mr. Otto Wulff von Amerongen recently paid a business visit to Bulgaria. Mrs. Anna Draganova of the ENB interviewed Mr. von Amerongen.

In the Federal Republic, as you know, is Bulgaria's first trading partner among the developed capitalist countries. Eight general cooperation agreements are being implemented currently and no one more than 30 industrial cooperation contracts between the two countries. You got acquainted also with Decree 3.13 of the Bulgarian State Council which opens a vast field of opportunities for industrial cooperation. How do you see the future of economic relations between the FR of Bulgaria and the FR of Germany?

Our common ambition is, proceeding from the new Decree, to revise the contracts on industrial joint work signed thus far. The decree is a good starting point and it serves to regulate our future teamwork legally. The attractive side of this frame of conditions, as I would call the document, will have to manifest itself in its flexible application in practice.

Economic relations between the FR of Germany and Bulgaria remain on a high level, and I see

their future in the development of industrial cooperation and technoscientific teamwork. The opportunities reside in the two countries' economic potential. Let me note that Bulgaria's present economic position is better than that of most countries around the world.

During meetings with representatives of the Bulgarian business circles I became familiar with the tasks now facing the Bulgarian economy in the new five-year-plan framework. What I see as particularly important is that the plan focuses less on the expansion of facilities than on modernizing the already existing production capacities and on raising labour productivity. This will make Bulgarian goods more competitive on the world market. That is where I can see the future of our collaboration and the continuance of the 8th Five-Year Plan.

At your meeting with the BCCI President Peter Roesner you were briefed on the initiatives which our Chamber plans in the Federal Republic in 1981. You made an interesting proposal - that the

Bulgarian Chamber should co-ordinate its planned events in time and place with the Eastern Committee, to achieve greater effect.

Working jointly with the BCCI is a pleasant duty for me. I proposed that we should co-ordinate our work programme as we do with the Chamber of Commerce and Industry of the USNR. In a certain sense there are difficulties holding events in the FRG because the different regions have different rhythms of life. You have chosen judiciously Hamburg to hold a seminar on reexport, and Munich for one on marketing. The Committee's work sector for Bulgaria could help a lot towards organizing Bulgarian Economic Days, as well as round-table talks for the successful participation in international fairs in the Federal Republic.

My visit was intended as a move to inform the West German economy about the prospects of the 8th Five-Year Plan and, as Chairman of the Eastern Committee, to help co-ordinate certain BCCI initiatives with our Working Sector for Bulgaria.

NEW ANALYZER SYSTEM DESCRIBED

Sofia ECONOMIC NEWS OF BULGARIA in English No 4, 1981 p 7

[Text] The Central Laboratory of the Ministry of Chemical Industries concerned with the automation of production processes has come up with an analyser system called Isotchrom. It will be used by chemical plants and factories to analyse liquids and gases by decomposing them into separate components and automatically rating the percentage of each. The isotchrom system uses microprocessors which permit the control of output in the production process and even on the conveyor belt. Later this year the isotchrom system is to be exported to the USSR and to Poland. In recognition of the good technical and technological ratings of the Bulgarian analyser, it was awarded a gold medal at the latest Plovdiv Fair.



Holographic diffraction grid, designed to decompose the light spectrum, and offering a choice of the required working moment.

CSO: 2020/49

PARTICIPATION AT INTERNATIONAL FAIRS NOTED

Sofia ECONOMIC NEWS OF BULGARIA in English No 4, 1981 p 2

[Article by M. Munzelov]

[Text] Leipzig

It was Bulgaria's 36th participation in the Leipzig spring fair which this year passed under the motto "For universal trade and technical progress." On an exhibition area of 3,300 sq. metres 19 foreign-trade organizations displayed the achievements of modern socialist Bulgaria in the fields of machinebuilding, electronics, electrical engineering, chemicals and the food-and-beverages industry.

Machinebuilding leads the way of Bulgarian industrial development, and it highlighted the basic theme of the exposition. BALKANCARIMPEX once more presented a great variety of machines and equipment for the mechanisation and automation of handling operations in inter-factory trans-

port and warehousing. Visitors and experts were most impressed by the new family of engine trucks, the universal RECORD forklifts, the overhead rail hoists with ropes and chains, and the TC-10 rack-serving machine which was shown for the first time at the Leipzig Fair.

The wide range of metalworking machines, manipulators, refrigeration and air-conditioning installations shown by MACHINOEXPORT aroused keen interest. The stands of ISOTIMPEX and ELECTROIMPEX displayed the latest products of Bulgarian electronics and electrical engineering.

A number of contracts were concluded at the Fair.

Tripoli

From March 1 to 20, the PR of Bulgaria exhibited at the International Fair in Tripoli, Libya. On an area of 1,000 sq.m. the Bulgarian Chamber of Commerce and Industry arranged the display of pro-

ducts from 25 foreign-trade organisations. Brisk businesslike activity highlighted the Fair. A number of trading companies and business circles of Libya, Tunisia, Cyprus and Malta established contacts and held talks with officials from MACHINOEXPORT, CHIMIMPORT, ELECTROIMPEX, LESSOIMPEX, RODOPAIMPEX, BULGARPLODEXPORT and other foreign-trade organisations. As a result of this, considerable deals were concluded.

Libyan business circles also displayed marked interest in the activity of TECHNOEXPORT and TECHNOIMPORT engineering economic organisations, which illustrated their design and building activity in Libya. Bulgarian experts have recently built a number of projects in the country, including a hospital in Syrte, a state agricultural complex at Jabel el Akhdar, etc.

Hundreds of thousands of visitors came to see the Bulgarian pavilion at the Fair.

BULGARIAN SCIENCE, TECHNOLOGY IN CANADA

Sofia ECONOMIC NEWS OF BULGARIA in English No 4, 1981 p 2

[Text]

Days of Bulgarian Science and Technology were recently held in Canada. They were devoted to the 1300th anniversary of the first Bulgarian state.

The Days were a resounding success in Ottawa, Montreal and Toronto. The official openings and press conferences were attended by presidents and rectors of universities, deputy ministers and prominent scientists. Bulgarian lecturers presented papers at seminars, round-table conferences and discussion panels, attended by a considerable number of Canadian experts.

The Bulgarian delegation in Canada for the Days had meetings and talks at the Ministry of Science and Technologies, the Canadian Scientific Research Council, the Centre for Scientific and Technical Information of Quebec and Toronto, and with the presidents of the Carleton university and the universities of Ottawa, Montreal and Toronto.

The Days helped a lot towards mutual acquaintance and the popularisation of Bulgaria, one of Europe's ancient states. The Canadian public highly appraised Bul-

garia's achievements in research, technology and the economy. Two agreements were signed: one between the State Committee for Science and Technical Progress on the one hand and Carleton University in Ottawa, and another, between the Bulgarian Academy of Sciences' Central Laboratory on the Theoretical Foundations of Chemical Technology and the Department of Engineering Chemistry of the Higher Polytechnical School of Montreal University. Plans are made for joint study in some themes, the exchange of information and visits by scientists and post-graduate students, visits by directors of certain scientific fields of special studies, etc. Previously established relations between Sofia University and Montreal University were strengthened and so were contacts between the Central Institute of Scientific and Technical Information and the Canadian Centre of Scientific and Technical Information. It was agreed to organise a seminar in Bulgaria on the problems of techno-scientific information with the participation of Canadian experts.

EXPLOITATION OF ENERGY, FUELS, RAW MATERIALS

Sofia ECONOMIC NEWS OF BULGARIA in English No 4, 1981 p 1

[Article by V. Kalchev]

[Text]

With the ever rising fuel, energy and raw material requirements of the individual CMEA member-countries, a special (goal-oriented) programme has been worked out for the development of the energy and raw material sector. The problem can best be solved with the concerted efforts of the socialist states. What is required is an agreed channelling, shifting and exploitation of available resources.

The aim of the Long-term Goal-oriented Programme of Cooperation (LGPC) in the field of energy, fuels and raw materials is evidently to increase the supply of these commodities that are in ever greater demand. One key task is to determine what each country separately and the CMEA as a whole will need in the long run. The needs ought to be economically substantiated by accounting the factors of their prospective growth as a result of expanding productive forces, and also the factors of their rationalizing — such as structural

changes and technical progress.

The Programme's Chapter on Resources includes the necessary steps to be taken by the CMEA countries until 1990. Of these steps the foremost are speeding up the development of nuclear power generation and of the pooling of energy systems, the joint construction of capacities for turning out more metal, chemicals, pulp and paper and microbiological products. Meanwhile the accent also falls on making better use of every country's own resources, on processing natural oil and gas more thoroughly, and limiting their use as fuels. The LGPC charts the ways of developing and expanding mutual deliveries of chemicals primarily based on international specialization and joint ventures. Steps are envisaged for making rational and most economical use of fuel and raw material resources at all stages of their extraction, processing, transport and technological application.

As a result of the application of the LGPC provisions, priority will continue to go to cooperation between CMEA states, while each individual member's economy will continue to rely chiefly on its national resources.

Bulgaria is party to most of the undertakings of this programme.

The guidelines of the country's fuel and energy balance development take account of the trends agreed under the LGPC. In October 1980 the National Assembly 16th session approved three basic principles which shape the country's energy policy at this stage and for the future:

— making the most of local resources with priority development of coal mining;

— maximum economy in fuels and energy and ever greater efficiency in their use;

— speeding up construction of nuclear power generation plants.

Bulgaria takes part in the LGPC Agreement on multilateral international specialization and cooperation in building and making mutual supplies of equipment for nuclear plants. Our country has accepted part of the recommendations on specialization in small-bulk chemicals manufacture; it participates in the basic undertakings of R & D cooperation included in the programme. Bulgaria contributes material resources and manpower to the development of iron-ore mines on Soviet territory. Through its share in the LGPC the country receives additional quantities of energy and raw materials, and builds its own raw-material base.

KOZLODOUI NUCLEAR POWER COMPLEX COMMISSIONED

Sofia ECONOMIC NEWS OF BULGARIA in English No 4, 1981 p 3

[Article by T. Lambov]

[Text]

Bulgaria has stepped into the world of the peaceful atom with the commissioning of the country's first nuclear power plant at Kozlodou. Its first 440 megawatt power block was put into operation in 1974 and another one with the same generating capacity followed suit in 1975. The third power block began generating electricity in 1980, the last year of the Seventh Five Year Plan. It is, in effect, the first power block of Bulgaria's second nuclear power station. Its commissioning has made the Kozlodou Nuclear Power Plant the country's biggest power generating facility, with a total capacity of 1,320 megawatts. The three reactors now infuse about 30 million kilowatt-hours of electricity into the national power grid daily.

A fourth 440 megawatt reactor is to be installed this year.

However, this will not be the end of development in Bulgaria. A more powerful nuclear energy complex is planned to rise by the historical town of Kozlodou on the Danube river.

On July 9, 1980, Prime Minister Stanko Todorov laid the founda-

tion stone of this nation's third nuclear power plant which will differ substantially from the first two. Instead of two reactors of 440 megawatts each, it will have a huge single reactor with a capacity of 1,000 MW. The first such reactor was installed at the Novovoronezh Nuclear Power Plant in the Soviet Union in 1980 and other ones are already being put together at the huge Atomenergoproekt, also in the USSR.

So the first 1,000 MW reactor to be installed outside the Soviet Union will be delivered to Bulgaria. On August 27, 1980, Bulgaria and the USSR signed a contract on drawing up the blueprints of the third stage of the Kozlodou Power Plant with two reactors of 1,000 MW each. This is a new element of Bulgarian-Soviet cooperation in the field. The main components will be delivered in 1983 and the following years.

The first 1,000 MW reactor marks the beginning of a new stage in the use of nuclear energy for electricity generation in Bulgaria. The commissioning of two such

reactors from 1985 onward will make Kozlodou this country's biggest energy complex with a total capacity of 3,760 megawatts.

The Atomenergoproekt Plant will be part of this complex. Its first two workshops for the production of spare parts and spare sections of high-voltage motors and for their repair have already been commissioned, and a third one is under construction. It will produce large-size equipment for nuclear power plants. It is a division of the Interatomenergointernatsionalnaya organizatsiya which supplies spares and non-standard equipment for the nuclear power facilities of the countries from the Council for Mutual Economic Assistance (CMEA).

In the near future a repository for storing the spent nuclear fuel will be built together with facilities for the repair of contaminated equipment and for the additional processing and storage of nuclear waste. A centre for training nuclear power plant personnel is also being built as part of the compound.

TECHNOIMPEX, BULGARIA SPECIALISTS ABROAD DESCRIBED

Sofia ECONOMIC NEWS OF BULGARIA in English No 4, 1981 p 4

[Text]

The People's Republic of Bulgaria has been maintaining economic relations and trade with a number of developing nations for many years. These relations are expressed in scientific and technical aid and in providing qualified Bulgarian specialists, who give their contribution in the creation of the infrastructure of these countries' national economies, and are involved in their economic planning, in the establishment and stabilization of their educational systems, in the reconstruction of different industrial sectors, etc.

One of the Bulgarian organizations which carry out this specific activity is Technoimpex. It gives scientific, technical and cultural aid to countries which need it, by providing them with specialists in the fields of industry, construction and architecture, transport and communications, energy, geological prospecting, education, culture, art and sports.

Most of the Technoimpex specialists working abroad are engineering experts, university lecturers and secondary school teachers, other experts and advisors.

The number of the countries with which Technoimpex is linked in close cooperation has increased substantially in recent years.

For many years Bulgarian specialists have been working in various Cuban institutions. They take part in the planning and working out of concepts and working projects for the reconstruction of many sectors of Cuba's economy. That country's biggest irrigation facilities in the provinces

of Matanzas, Bayamo, Pinar del Rio and Oriente were built with the technical help of Bulgarian water experts. Big citrus fruit plantations and livestock farms are being set up on the island of Pinos, town-planning improvements are being introduced in many Cuban settlements, motorways are being built, joint research and development are being expanded, and cultural exchange is being diversified.

High appreciation has been expressed on more than one occasion of the job done by the Bulgarians who service the power plants in all parts of Libya, and by the hydro engineers, agronomists and technicians who work on the implementation of the ambitious Jabel Akhdar Plan which will restore fertility to Libya's Cyrenaica province.

Words of gratitude have also been said of the Bulgarian engineering personnel in Libya. That country's Electrification Minister has on many occasions expressed high appreciation of the work of the teams which man the power

plants in the towns of Zliten and Zuara, of the efficiency of the electricians who have fitted the installations of many sub-stations, and has said he wished more Bulgarian specialists worked in Libya.

During the visit of the Libyan President to the region known as "the Bulgarian area" he ordered the original name to be changed and the region's map to be modified. As Lyubomir Kalinov, the first Bulgarian agronomist in Libya explains it, "Before we began changing the image of this region with the help of Libyan workers it was a yellow spot on the country's map; it was nothing but part of the huge Sahara Desert. When the Libyan President came and saw that it had been converted into a green garden, the government issued a decree by which it was renamed from El Abiar to First of September, the day of the revolution, and the colour of this region on the map of Libya was replaced with green, for green it indeed was."

The deeds of the friends from Bulgaria who readily share their

knowledge and experience are known not only in Cuba and Libya, but also in Algeria, Tunisia, Ethiopia, Nigeria, Syria, Afghanistan, Angola, Mozambique and Iraq. They help draw up national socio-economic development plans, set building industry standards and methods for solving communication problems, take part in international contests and design and build many engineering facilities.

The signing of new intergovernmental agreements with Angola, Mozambique, Ethiopia and Nigeria has opened additional possibilities for increased cooperation with these countries by providing them with lecturers, engineering, agricultural and other experts.

TECHNOIMPEX

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Telephone: 881-571/2/3

Telex: 232 77 - timpex

Cables: TECHNOIMPEX SOFIA



Bulgarian beekeepers passing on their experience on Libyan soil.



Vessil STEFANOV, Director
General of Technoimpex



Bulgarian engineering technical experts
working in Africa



Fig. 1 Power station in Libya maintained by a Bulgarian team of technicians.

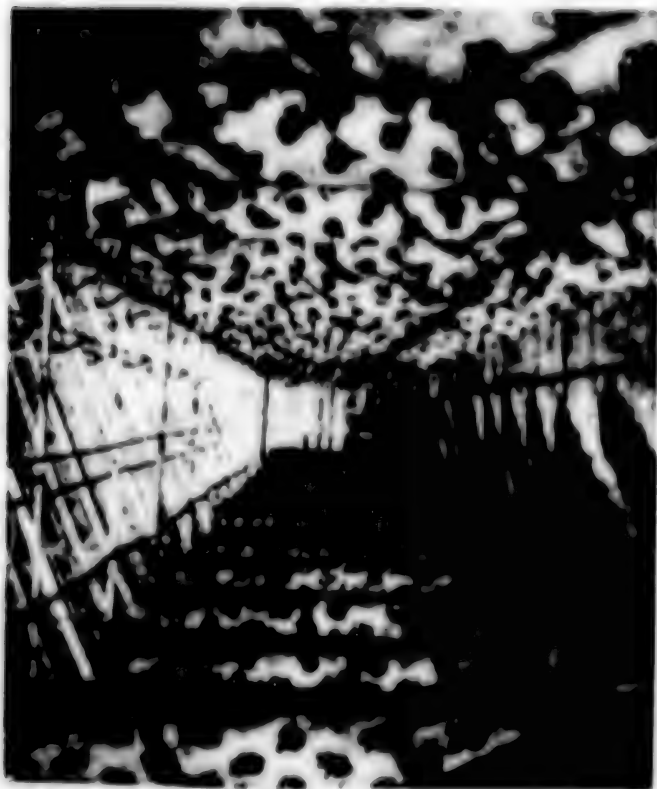


Fig. 2 Greenhouse orchard near El-Marj, Libya, built and operating after a Bulgarian method.

HYDRAVLIRA SEC. PROMOTES EXPORT PROGRAM

Sofia ECONOMIC NEWS OF BULGARIA in English No 4, 1981 pp 4-5

[Article by D. Zhelev]

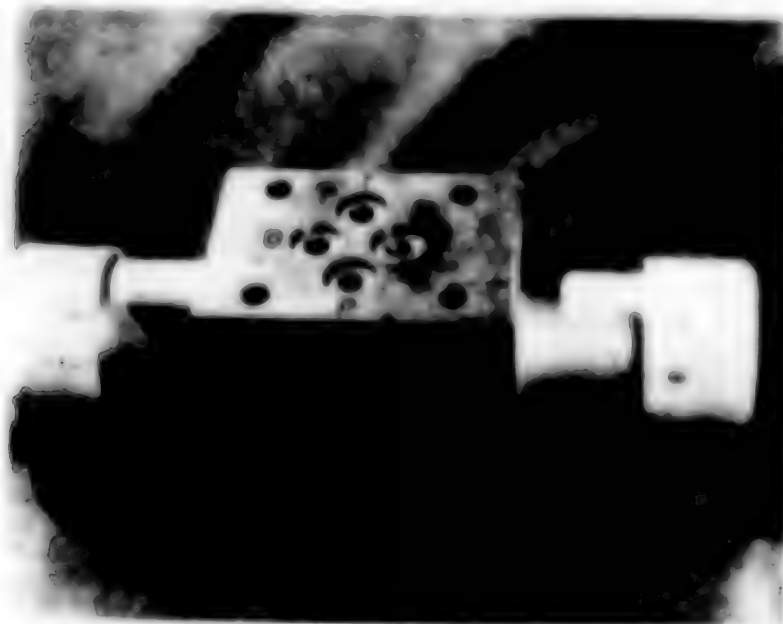
[Text]

Hydraulic Gear Pumps

The Hydraulika State Corporation with head-offices in the town of Kazanluk is the only one in Bulgaria which specializes in the production of hydraulic and pneumatic devices, units and systems. The corporation's plants are equipped with highly productive machines and gauging apparatus. It is thus, coupled with the knowledge and skills of the corporation's technical personnel, that accounts for the high quality of its products.

Hydraulic and pneumatic equipment finds increasing application in the mechanization and automation of a variety of production processes and their control. Its use cuts down labour consumption and increases labour efficiency in all economic sectors.

The Hydraulika State Corporation produces a wide range of devices and units, of particular interest among which are



Hydraulic Gear Pumps

They are manufactured in 53 types and sizes divided into 3 groups depending on the geometrical working vol., V_g which ranges from 1.22 to 147 cm³. The nominal pressure is from 10.5 to 17.5 MPa at up to 3,500 revolutions per minute. These pumps' greatest asset is their efficiency which is as high as 95.5 per cent and the small weight-power ratio which is

in the region of 0.2-0.5 kg/kW.

The corporation also turns out a wide range of twin gear pumps which include both combinations of pumps from the same group and combinations from different groups. This offers the clients a rich choice of working volumes.

Pumps for a pressure of 25 MPa and with a speed of up to 4,500 r.p.m. have been developed.



Hydraulic Distributors

These are produced in two convertible battery type models. The first has a working pressure of 20 MPa, a rated discharge of 30 l/min and a parallel distribution of the working liquid with a direct flow to the tank when the sections are idle. The distributor has a protective valve with 4 adjustment stages, from 4 to 10 MPa, from 6 to 12 MPa, from 7 to 18 MPa and from 14 to 16 MPa.

A wide range of distributors are produced under a license of West Germany's BOSCH firm. They are intended mainly for the metal-working industry. These distribu-

tors have orifices of 6, 10, 20 and 32 mm, a working pressure of 32 MPa and the maximum discharge of the biggest one is up to 240 l/min with A.C. electromagnets: 110 and 220 V.

A series of miniature hydraulic elements with conventional orifices of 6 and 10 mm and a working pressure of 16 and 32 MPa are also produced. These are distributors with electromagnetic control, an adjustable throttle, a protective valve, a discharge regulator, a double reverse valve with hydraulic control. These elements are designed for modular assembly.



Hydraulic Cylinders

The corporation produces a variety of piston, plunger and telescopic cylinders.

The piston hydraulic cylinders are available in 14 types and sizes with diameters from 25 to 200 mm. Their working pressure is 20 MPa and they have a piston surface ratio of 1.25 and 1.5. The piston is made of 12CrNi2.

The plunger hydraulic cylinders

are produced in 13 types and sizes with a plunger diameter from 25 to 200 mm, working pressure 20 MPa, rated plunger speed 0.3 m/sec.

The telescopic hydraulic cylinders are of 10 types and sizes. Their working pressure is 20 MPa and their speed 0.3 m/sec. The number of stages ranges from 2 to 5. The maximum stroke of a single stage being from 100 to 300 mm.



Hydraulic Units

The Hydraulika State Corporation manufactures hydraulic units with a rated capacity of 40, 63 and 160 dm³ and a working pressure of 17 MPa, which find application in almost all sectors of the economy. Special versions are made according to clients' wish.

The Hydraulika State Corporation not only meets local de-

mand, but a considerable portion of its produce is exported to the Soviet Union, Czechoslovakia, the German Democratic Republic, Poland, Romania, Cuba, Italy, the Federal Republic of Germany, France, Sweden, Switzerland and Austria.





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 Kazanluk
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EXPORTER
 Machinexport
 8, Aksakov Street
 Sofia
 Telephone: 885-321
 Telex: 023-425
 Cables: MACHINOEXPORT

CSO: 2020/69

DECREE EXPANDS OPPORTUNITIES FOR ECONOMIC COOPERATION

Sofia ECONOMIC NEWS OF BULGARIA In English No 4, 1981 p 6

[Text]

Decree No. 535 of March 28, 1980 of the Bulgarian State Council "On Economic Cooperation between Bulgarian Juridical Persons and Foreign Juridical and Physical Persons" has expanded the opportunities for international economic joint ventures with Bulgarian economic organizations to the extent of setting up joint companies with foreign participation, to work on the territory of the PR of Bulgaria.

Intent on popularizing this important document which has attracted much attention on the part of world business circles, we are opening this new column, in which we shall treat all the questions related to the application of Decree No. 535.

INFORMATION AND
CONSULTATIONS BUREAU

A specialised bureau has been set up at the Bulgarian Industrial Economic Association and the Bulgarian Chamber of Commerce and Industry to assist

Bulgarian enterprises and foreign companies on aspects of economic joint ventures. The Bureau's main tasks:

- to provide information and consultations on legal, currency and financial, labour law and other aspects of foreign economic cooperation

- to assist the parties in preparing, concluding and implementing economic venture contracts and in carrying out economic activity on the territory of the PR of Bulgaria with the participation of foreign juridical and physical persons.

- to prepare for publication or supply information materials to other press publications in the country and abroad, relative to the

particularities of joint ventures, industrial cooperation contracts and other forms of economic joint work.

- to inform business circles at home and abroad about the existing statutes of joint companies and the other forms of economic cooperation in line with Decree No. 535, and to systematize, analyze and sum up the experience from its application.

The Bureau is staffed by experts with high scientific and theoretical qualifications and extensive practical experience in foreign economic, contractual, legal, currency, credit, financial, accounting and labour law questions, etc.

The Bureau provides services asked in written form by Bulgarian and foreign enterprises and companies, against payment at fixed rates.

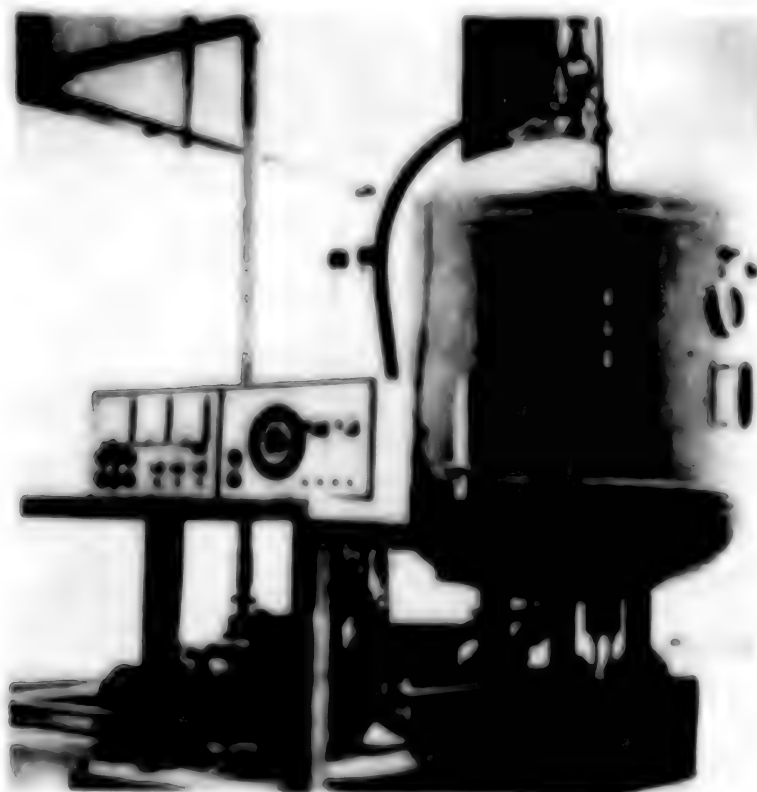
Address:
Sofia 1000
No. 11A, Al. Stamboliski Boul.
BULGARIAN CHAMBER OF
COMMERCE AND INDUSTRY

Bureau for Information and Consultations on Joint Economic Ventures in the PR of Bulgaria

IONIC NITRATION OF STEEL PARTS DESCRIBED

Sofia ECONOMIC NEWS OF BULGARIA in English No 4, 1981 p 7

[Text] An installation and technology for nitration in a smouldering discharge, developed by the Lenin Higher Mechanical and Electrical Engineering Institute, are designed for the surface chemical-thermal nitration and carbo-nitration of steel parts. The new technologies and devices increase the wear resistance of treated parts two- to three-fold, and improve their resistance to corrosion in a moderately aggressive environment, such as humid atmosphere, water, etc. In comparison with the conventional processes, the electricity bill is reduced by half, and working gases diminish by 80 to 100 times. The process is non-toxic, it improves the culture and hygiene of labour. It permits the treatment of parts of unlimited size and weight, with practically negligent changes and distortions, which amount to a very high degree of accuracy.



CSO: 2020/49

SOLID CHEMICAL NICKEL-PLATING DEVICE, TECHNOLOGY

Sofia ECONOMIC NEWS OF BULGARIA in English No 4, 1981 p 7

[Text] Developed by the Lenin Higher Mechanical and Electrical Engineering Institute, the technology and installations for solid chemical nickel-plating find application in the field of current-free plating of parts with nickel alloy. At the outset the alloy is of low hardness, which after thermal treatment increases to 70 HRC units. The plating thus obtained possesses high qualities--it is corrosion- and wear-resistant. Unlike galvanic processes, the distribution of the plating particles is much more even. The new process is open to layer-thickness control of amplitudes of 2 to 5 microns.



CSO: 2020/49

TOURISM ASSETS FOR MEETINGS DESCRIBED

Sofia ECONOMIC NEWS OF BULGARIA in English No 4, 1981 p 8

[Article by A. Radev]

[Text]

A comparative newcomer on the tourist market, Bulgaria has put to best use a number of factors - favourable geographic location, well-developed tourist industry and international transport facilities plus discount rates for tourists from abroad, to assure fame as a suitable place for holding world and regional congresses, symposia, annual company meetings and other international get-togethers. Experts worldwide acknowledge the suitability of Bulgaria as a congress country.

The Beginning

In 1968, only ten years after Bulgaria had appeared on the European tourist map, she managed to win the preference of millions of tourists and to offer a diversion from the traditional tourist migration routes. That was the year when the Centre for International Events was set up as a specialised national congress bureau under the state Committee for Tourism. Simultaneously, the first big facility was built.

the Congress Centre in Varna, better known as the Palace of Sports and Culture. In that first year it successfully passed several tests with thousands of delegates from all over the planet: at the World Congress of Stomatologists (1 400 participants), the 7th World Congress of Sociologists (1 700 participants) and two years later the 11th World Congress of Architects, which confirmed the directors' plan.

There followed the 15th World Congress of Philosophy, the 2nd Congress of Russian Language Teachers (MAP RYAL), the Congress of the International Olympic Committee, the 8th World Congress of Trade Unions, the 18th International Congress on Space Research COSPAR, the World Congress of Quality Assurance, the Interparliamentary Conference and many other events, which followed.

History as a Warrant of the Future

In 1970, an event of permanent significance for the future builders of

human culture - the World BANNER OF PEACE Assembly - convened in Sofia for the first time, and will periodically reconvene in the Bulgarian capital.

With the world Conference of Ministers of Culture in 1980, Bulgaria once more acted as a world centre of cultural manifestations.

During 1980 this country hospitably opened its doors to many thousand participants in more than 250 world events staged here. The list is too long even to start being enumerated, yet it is sufficient just to say that the World Parliament of Nations for Peace proclaimed one of the oldest and most attractive cities of the old continent - Sofia, Bulgaria's capital - to be henceforth known as THE CAPITAL OF PEACE.

This year, 1981, will mark the peak of international events held in this country. The expansion of this genuine industry will be matched by numerous events and celebrations marking the 1300th anniversary of the first Bulgarian state. This country, which for centuries has aroused admiration for its cultural monuments and natural sights, its folkloric wealth, highly-appreciated cuisine and hospitality, will this year present a unique display before all and everyone who make Bulgaria their choice. One significant addition to the special congress facilities is open its doors for the participants in international meetings and events will be the new Sofia Congress Centre known as the People's Palace of Culture. It is the largest building of its kind in the country, a fresh challenge to all competition and a true temptation for anyone who is faced with the choice of a next congress venue.

Only one Address

The year 1981 - World Congress of Metal Casting, World Congress of Anatomical Societies, World Festival of Animated Cartoons. Speaking of congresses, conferences, meetings and the like, there is one address in Bulgaria to remember: Sofia, No 3, St Sophia Street - Centre for International Events.

TECHNOEXPORT, ENGINEERING ORGANIZATION, DESCRIBED

Sofia ECONOMIC NEWS OF BULGARIA in English No 4, 1981 p 4

[Advertisement]

TECHNOEXPORT offers its customers complete plant, machinery and apparatus for the canning, dairy, meat-processing, wine and tobacco industries, as well as for bread-baking, bottling and packing.

Bulgarian designs and Bulgarian technologies are applied with good success in canning factories in Cuba, Uruguay, Argentina, Algeria, the GDR, Czechoslovakia, Syria, Iraq, Romania and other countries; they have shown long exploitation life and high-quality production.

TECHNOEXPORT offers fully-automated complete lines for the production and bottling of aerated soft drinks; capacity ranges from 4,000 to 36,000 bottles an hour.

TECHNOEXPORT exports flowlines for the production of yellow (kashkaval) cheese, white brined cheese and yoghurt milk made under Bulgarian technologies.

TECHNOEXPORT's items supplied for the tobacco industry include complete lines, machinery and equipment for preparatory shops to tobacco factories and the like; they are exported to Iraq, Iran, the USSR, the GDR and Syria.

Meat factories with full-cycle processing machinery have been built by TECHNOEXPORT in Mongolia, the USSR, Yemen, etc.

TECHNOEXPORT EEO--Bulgaria
Sofia, No. 20 Joliot-Curie Street
Telex: 022193

CSO: 2020/49

BRIEFS

PLOVDIV SYMPOSIUM--During the International Spring Fair in Plovdiv--from May 6 to 9--an international symposium will be held on the theme **/Efficient Use of Thermal Energy in the Household/** [in boldface]. Information on the symposium can be obtained from the Bulgarian Chamber of Commerce and Industry--the sector for links with industry. [Text] [Sofia ECONOMIC NEWS OF BULGARIA in English No 4, 1981 p 2]

METALWORKING EXHIBITION--From June 6 to 12 in the grounds of the Plovdiv Fair (spring) an international specialised technical exhibition will be held on the theme: "Metalworking Machines and Equipment, Tools and Accessories, Forging, Pressing and Casting Machines, Machines for Counterpressure Casting and Robots." An international symposium will be organized at the same time on Building Automated Complex Systems of Machines and the Application of Robots. Information about the exhibition and symposium is available from the Bulgarian Chamber of Commerce and Industry. [Text] [Sofia ECONOMIC NEWS OF BULGARIA in English No 4, 1981 p 2]

HUNGARIAN DELEGATION--A delegation of Hungarian experts and managers of the electronics and electrical engineering industry paid a visit to Bulgaria. Their tour was arranged by the Territorial sections of the Bulgarian Chamber of Commerce and Industry and the Hungarian Chamber of Commerce. The guests were acquainted with the achievements of Bulgarian electronics and electrical engineering and the country's export potentials in that sphere. Business meetings were held at the Bulgarian ELECTRO-IMPEX and ISOTIMPEX foreign trade organizations. Eng. Peter Roussev, the President of the BCCI, received the Hungarian delegation. Discussion ranged over bilateral cooperation in electronics and electrical engineering and the activities of the two chambers. [Text] [Sofia ECONOMIC NEWS OF BULGARIA in English No 4, 1981 p 2]

TELEPHONE WORKS--The Telpher Works in Gabrovo have diversified into the manufacture of two new overhead-rail hoists. Mass production has now begun of the first Bulgarian electric telpher with a loadlimiting safeguard, and of one for work in low-ceiling premises which can lift and shift loads at small heights. [Text] [Sofia ECONOMIC NEWS OF BULGARIA in English No 4, 1981 p 2]

SPIRALLY WELDED PIPES--The Steel Pipe Plant in the town of Septemvri has introduced a new technology for the production of titan-alloy flux varieties designed for making spirally-welded pipes. It was jointly developed by a team of experts of the Plant and the Higher Institute of Chemical Technology in Sofia. Experiments are now under way in industrial conditions and regular production will begin late in August this year. [Text] [Sofia ECONOMIC NEWS OF BULGARIA in English No 4, 1981 p 2]

VIDIN CHEMICALS--At the chemical mills in Vidin an Institute has been set up to do research on pneumatic tyres and polyamide fibres. It will concentrate on improving quality standards in the manufacture of internal tubes and outer tyres, and of polyamide fibres by using new waste-free technologies, with the comprehensive automation of production processes and automated control systems. [Text] [Sofia ECONOMIC NEWS OF BULGARIA in English No 4, 1981 p 2]

NEW LAVENDER VARIETIES--Research workers of the Institute for Rose Attar, Essential Oils and Medicinal Crops in the town of Kazanluk have tested nine new varieties of lavender in field conditions. The Haemus, Stepnaya and Karlovo varieties ranked highest in aromatic standards, oil content and a number of other indicators which surpass all lavender varieties grown so far. [Text] [Sofia ECONOMIC NEWS OF BULGARIA in English No 4, 1981 p 2]

WOODCUTTING MACHINES--Seven new highly-productive lines of milling and cutting machines have been developed by the Woodworking Institute in the town of Pazardjik. They are used in the processing of coniferous timber of low thickness. Bulgarian and Soviet experts pooled their efforts in building the lines which have now been successfully put into operation in six Bulgarian factories. A number of other countries have evinced interest in the lines. [Text] [Sofia ECONOMIC NEWS OF BULGARIA in English No 4, 1981 p 2]

COOPERATION PROTOCOL WITH DPRK--The signing of a Protocol in Sofia concluded the 11th session of the Intergovernmental Commission for Economic, Scientific and Technical Matters between Bulgaria and the Korean DPR. The Protocol was signed by the Candidate Member of Politburo of the CC of the BCP and Deputy Prime Minister Georgi Yordanov who presides over the Bulgarian part of the Commission, and by the Member of Politburo of the CC of the Korean Workers' Party and Deputy Chairman of the Administrative Council of the Korean DPR Ke Un The, who heads the Korean part of the Commission. A Protocol was also signed on the work of the Subcommittee for Techno-scientific Cooperation which is part of the Intergovernmental Commission. [Text] [Sofia ECONOMIC NEWS OF BULGARIA in English No 4, 1981 p 6]

DELEGATION TO SWEDEN--A Bulgarian economic delegation, led by the Minister of Electronic and Electrical Engineering Vassil Houbchev, visited Sweden and held talks with the Minister of Industry Niels Osling and the Minister of Trade Stefan Burenstam-Linder on the possibilities, forms and channels for expanding bilateral scientific, technical and economic cooperation on a bilateral basis. A number of documents were signed, spelling out the fields and forms of cooperation, and so was a general agreement on economic, industrial and trade cooperation between Bulgarian foreign trade organisations and the Swedish Electrolux Co. [Text] [Sofia ECONOMIC NEWS OF BULGARIA in English No 4, 1981 p 6]

DELEGATION FROM MONGOLIA--Deputy Prime Minister Krastyu Trichkov who presides over the Bulgarian part of the Intergovernmental Bulgarian-Mongolian Commission for Economic, Research and Development Cooperation, received the Chairman of the Mongolian State Committee for Economic Relations with Foreign Countries Dangasurengyin Saldan. Their talks passed in a friendly atmosphere and ranged over aspects of further expanding cooperation between the two countries. [Text] [Sofia ECONOMIC NEWS OF BULGARIA in English No 4, 1981 p 6]

PROTOCOL WITH ROMANIA--In Bucharest a Protocol was signed on economic, research and development cooperation in agriculture and the food industries of Bulgaria and Romania. It was decided to continue and expand joint scientific research in the field of selection, of production technologies, and in the struggle against the diseases and pests affecting plants and animals; another field is the improvement of food products manufacture. [Text] [Sofia ECONOMIC NEWS OF BULGARIA in English No 4, 1981 p 6]

MARITIME AGREEMENT WITH U.S.--In Sofia an agreement of maritime shipping was signed between the governments of Bulgaria and the United States of America. It provides for more favourable conditions for activating cooperation in the sphere of maritime shipping and trade. The agreement will help further to promote and expand economic relations between the two countries. A Protocol on cooperation and trade in 1981 was also signed. A general agreement on cooperation between Bulgarian engineering, economic and foreign trade organisations and the US Dow-Chemical was concluded. [Text] [Sofia ECONOMIC NEWS OF BULGARIA in English No 4, 1981 p 6]

VISIT TO JAPAN--On a business visit to Japan, the Minister of Machinebuilding Toncho Chakurov attended the opening of a new automated factory of the FANUC Co. in the town of Fudji. In a number of mechanical engineering enterprises business negotiations were conducted. Opportunities were discussed with the Itoh and Kobe Steel Companies for expanding cooperation in manufacturing machine tools and diesel engines. Under the general agreement on economic, industrial and techno-scientific cooperation signed between Italy's Montedison Co. and a number of Bulgarian economic and foreign-trade organisations, the Joint Coordination Committee held its 6th session in Sofia. A Protocol and a working programme on cooperation in 1981 were signed. [Text] [Sofia ECONOMIC NEWS OF BULGARIA in English No 4, 1981 p 6]

RELATIONS WITH BANGLADESH--The Bulgarian Prime Minister Stanko Todorov received the State Minister for Trade of Bangladesh Chaudri Tanbir Ahmed Sidiki. The guest expressed his satisfaction with the past and current progress of economic and commercial relations between the two countries. Premier Stanko Todorov made a positive appraisal of the development of bilateral trade and pointed to the existing favourable opportunities for increasing the goods exchange still further. The Minister of Foreign Trade Hristo Hristov and the State Minister for Trade of Bangladesh Chaudri Tanbir Ahmed Sidiki signed a long-term trade agreement covering the period until 1986 and a Protocol on trade for 1981-1982. [Text] [Sofia ECONOMIC NEWS OF BULGARIA in English No 4, 1981 p 6]

SINTERING ROCK MATERIAL--The invention proposed consists in obtaining baked rock material from one kind of rock only without any additives whatever. Use

unused deposits of natural raw materials in abundant supply. The invention was made at the Petrurgia Scientific and Production Enterprise in Sofia. The new technology permits the introduction of full automation of the production process and a drastic cut in energy consumption in comparison with similar materials such as items made of cast stone. The production process could be organized on the basis of such kind of energy as is economically most appropriate, whereas only liquid fuel is used for making cast stone. [Text] [Sofia ECONOMIC NEWS OF BULGARIA in English No 4, 1981 p 7]

REVERSIVE REDUCTOR--The invention was made at the Institute of Electrical Engineering Industry in Sofia. The new reductor contains fewer parts and simultaneously meshed gears; this leads to a better transmission efficiency, and makes the reductor more compact and lighter in weight. An improved technology has been devised for the manufacturing, assembly and lubrication of the gears; the construction has been simplified, and bearing points relieved of excess load. The invention has been built into a P-10 manual threader; as a result, its efficiency has been drastically improved, and less metal goes into its manufacture now. [Text] [Sofia ECONOMIC NEWS OF BULGARIA in English No 4, 1981 p 7]

CONTROLLING PLANT GROWTH--A new means of controlling the growth, development and productivity of plants has been devised at the Bulgarian Academy of Sciences. It is related to the application of itaconic acid and its derivatives as stimulators of plant blossoming, setting and ripening. The final product shows excellent nutritious, taste and aesthetic properties. [Text] [Sofia ECONOMIC NEWS OF BULGARIA in English No 4, 1981 p 7]

OSO: 2020/49

METALLURGY, ENGINEERING IN FIRST QUARTER 1980 VIEWED

Prague HUSPODARSKI ROVINY 16 Czech 24 Apr 81 p 2

(Article by Jiri Poell, representative of cognizant department, CPCZ Central Committee: "Metallurgy and Engineering")

[Text] Fulfillment of production tasks by the Ministry of Metallurgy and Heavy Engineering has gradually improved during the first quarter. After a failure to fulfill the plan in January, the goods production plan was fulfilled at the 101.2 percent level in March.

The development of worker initiative and activity preceding the party congress manifested itself in the fulfillment of a higher percentage of the planned tasks in March (8.9 percent) and in the fulfillment and overfulfillment of planned tasks in all of the ministry's VRJ's. Over the first quarter, the Federal Ministry of Metallurgy and Heavy Engineering fulfilled its goods production plan at the 100.5 percent level, and the plan level was exceeded by Kcs 169 million. The VRJ's OKD (Ceskomoravsko-Kalben-Banck national enterprise) Prague, OKD Dukla and Hutny druževyrbra (Secondary Metallurgical Production) showed a slow pace compared with the plan in the first quarter. In metallurgy and ore mines, a relatively low share was posted by the VRJ Hutnictvi zeleza (Iron Metallurgy), where the main cause was an insufficiency of blast furnace charges. In addition, the plans for iron, steel and rolled materials were not fulfilled.

Nonfulfillment of the plan in gross terms was primarily caused by VRJ Skoda Plzen, where negative effects resulted from a low level of preparedness, late or missed deliveries of basic materials (OKD Blansko), late deliveries of sheet metal from Vitkovice-zelezarny a strojirny Kl. Gottwalda (Klement Gottwald Ironworks and Engineering Works) and of electrical instruments, materials and the like. Minor shortfalls in gross output for VRJ Ceskos and Ca. Vozduchotechnicke zavody (Czechoslovak Air Engineering Plants) occurred in Vitezny umor (Victorious February) Brno, Kralova, Slovenske strojirny (Slovak Engineering Works) Uhersky Brod, and Zavody na vyrobny vazduchotechnickich zarizeni (Air Engineering Equipment Production Plants) Milosko. Some 26 enterprises failed to meet the target for gross output, with a total shortfall of Kcs 307 million. The largest shortfalls were registered by Trinec zelezarny (Trinec Ironworks), Skoda Plzen, Slovenske energeticke strojirny (Slovak Power Equipment Works) Tlasec, Protovske strojirny (Protov Engineering Works), Vysokeho Slovenske zelezarny (East Slovak Ironworks) Kosice, OKD Dukla and OKD Blansko.

After failing to fulfill the plan for adjusted output for the first 2 months (99.1 percent), the VML's achieved very favorable results in March (105.1 percent, above-plan value of Kcs 211 million). Only the VML Co. vagonky [Czechoslovak Railcars] failed to fulfill the March plan. Fulfillment of the plan for the first quarter at the 101.2 percent level was assisted by good fulfillment of production and sales targets and by improvement in expenditures. In the first quarter, the assignments for value added were fulfilled by all VML's except Hutnictvi selesa (97.5 percent), where the shortfall was Kcs 175 million.

Among the other indicators, the selection of named products was 95.92 percent fulfilled, a figure which was 0.24 percentage points short of last year's level. The Kcs 801 million shortfall was contributed to absolute shortfalls in the VML Hutnictvi selesa, CKD Prague, CKD Dukla, Co. vazuchotechnicke zavody, Cespos and Rudne bane a magnazitove zavody [Ore Mines and Magnesite Plants].

SKKZ [Klement Gottwald New Ironworks] Ostrava, which had problems with blast furnace No 1, did not meet its target for pig iron. In addition, Vychodoslovenske selezarny and Trinecke selezarny failed to make up their shortfalls from January, which also was reflected in their nonfulfillment of their targets for crude steel. CKD has a shortfall in the production of compressors and vacuum pumps, primarily as a result of late subsupplier deliveries, an incomplete complement of production workers, and a low level of preparedness. CKD fell short as well in the production of free forgings and in municipal transport vehicles, owing to a delay in starting up production of diesel engines and to necessary changes in selection caused by failures to fill orders.

By the end of February the spare parts production plan for certain sectors was 16.6 percent fulfilled (excess of Kcs 41.4 million). The plan assignments were not met by the VML's Co. vagonky, CKD Dukla and Rudne bane a magnazitove zavody.

By the end of February the sales plan as a whole had been exceeded by Kcs 785 million (103.4 percent). Only 14.9 percent of the annual task was fulfilled, which is 1.1 percentage points lower than the proportion of the year spent. Nonetheless, the targets for investment deliveries have been met; the plan was fulfilled at the 117.2 percent level, but fulfillment comes to only 10.6 percent of the annual assignment. This fulfillment was particularly the result of VML's Skoda Pizen and Vitkovice.

Deliveries for investment must be improved, particularly those for the Jaslovske Bohunice and Dukovany nuclear power stations, where it is necessary to fundamentally improve the quality of coordination in planning and in the technical and commercial areas. At the Melnik III power station, attention must be concentrated on fulfillment of the tasks which were designated for fulfillment in the relevant plan paragraph. At the Cerny Vah power station this year, three units with capacities of 100 MW each must be put into operation between April and December. There are also important tasks in support of heat stations and in housing construction. As regards opencut mining of lignite, attention must be concentrated on supply and installation of equipment, particularly for the second stage of the Host opencut, the Jiri opencut, and the third stage of the CSA opencut. The VML's Skoda Pizen, CKD Praha, CKD Dukla, Sigma Olomouc, Vitkovice and Ceskoslovenske Vazuchotechnicke zavody have critical tasks in deliveries for investment.

Deliveries for the domestic market were overfulfilled by Kcs 31 million, and accounted for 18.5 percent of the annual assignment. Deliveries to socialist countries were Kcs 524 million above plan, and all VUL's met the plan assignments. Deliveries to nonsocialist countries amounted to 12 percent of the annual plan, and the plan was overfulfilled at the 110.9 percent level. Through February the ministry's own investments have been carried out to the extent of Kcs 41 million, which, however, is only 8.9 percent of the annual planned quantity. The VUL's Hutny druhevyroba and CKD Prague failed to fulfill their plans. Among financial and economic indicators, there was a shortfall in planned profits through February of Kcs 67 million, as a result of an increase in expenditures amounting to 0.14 hallers per koruna of adjusted output, totaling Kcs 33.1 million, and also as a result of negative effects from imports.

The document "Main Directions of the Economic and Social Development of Czechoslovakia in 1981-1985" states that all management levels must devote decisive attention to improvement of planning as the main instrument for assuring an increase in social efficiency and ultimate national economic results. In this regard, there have been great changes in the management of our economy, since on 1 January the Set of Measures for Improvement of the System of Planned Management of the National Economy went into effect. Plan fulfillment in the first quarter by the Federal Ministry of Metallurgy and Heavy Engineering must also be judged in these terms. Even though a short period is involved, it already suggests to us many areas in which additional attention should be focused. The plan fulfillment results to date further heighten the necessity for intensifying the information process and for stepping up our efforts to master the new procedures.

In the current stage, a particular concern is that of directing workers' initiative and participation in management and their role in implementing "kozrachet" inside the enterprise to the factors of intensive growth, particularly to improvement of the utility value of products (i.e. technical standards, quality, selection, timeliness of deliveries), increasing export capabilities, better utilization of production assets, decreasing the energy and material intensiveness of production, and improving labor productivity and satisfying demand, especially in deliveries for investment and the foreign market. In all operations centers an effort must be made to achieve maximum results with the use of minimum resources. The results of plan fulfillment in the first quarter further prompt us to guide the development of worker initiative and activity towards the saving of working time (i.e. by beating production norms), to necessary savings in consumption of raw and other materials compared with the established norms, to decreasing waste and losses, to having more energy of all types than is called for in the existing norms, and to increasing the percentage of highest-quality products in total output. The way in which initiative is displayed should be differentiated and its orientation should be based on the principal task.

BA80

CSO: 2460/194

TECHNICAL DEVELOPMENT, REFORM, INTERNATIONAL COMPETITIVENESS DISCUSSED

Budapest MAGYAR HIRLAP in Hungarian 7 Jun 81 p 9

[Interview with Jeno Andics, Laszlo Antal, Mihaly Bihari, Zoltan Messaros and Tibor Vamos by Zsolt Papp, held on 28 May 1981: "From the Debates of the Science Club. Our Nation and Progress in Science and Technology"]

[Text] This was the topic of a discussion on "Science Club" broadcast by Hungarian Television on 28 May. The participants were Jeno Andics, sociologist; Laszlo Antal, economist; Mihaly Bihari, sociologist; Zoltan Messaros, chemical engineer, research director of the Chinoin Pharmaceutical Factory and academician Tibor Vamos. The moderator was Zsolt Papp. Some details of the conversation are presented below.

[Zsolt Papp] How much technical innovative capacity is there in the Hungarian economy?

[Jeno Andics] We did not ask for this, but the world market applied a very rigorous yardstick to the Hungarian economy in the 1970's. Despite the presence of a number of quite dynamic enterprises, the Hungarian economy was found wanting in the world market in the sense that, relative to the world market trends, technological and engineering progress and innovation processes in our country may be described as highly inefficient, slow and generally weak. The present innovative capacity of the Hungarian economy is below not only some of the more advanced economies but also some of the requirements necessary to catch up with these processes or at least to conserve our present position in the world. The problem of technological progress and the special characteristics of innovative processes call attention to the presence of some problems in the operation of the Hungarian economy indicating that the growth pattern beginning at the start of the 1950's or the second half of the 1940's is not suitable to continue further progress of the Hungarian society and economy. We are now at the crossroads where we must change the methods we used up till now.

[Zsolt Papp] When and to what extent are enterprises interested in technological development? What factor determines this?

[Laszlo Antal] This depends on many things. An enterprise may have an incentive because it is under duress. It may be forced by its inability to sell its

products. It may be forced out of the marketplace. It may be forced because of lost state subsidies. It may be forced because we signed an international treaty it has to conform to. Compulsion can come in two forms. One is compulsion by the state; the other is a result of marketing difficulties and loss of control. If I call the latter defensive, then the other must be called offensive. Our problem is not a lack of creative people and good ideas. We even have innovations. We say that the problem is speed of propagation. I would also add that defensive attitudes dominate the scene and offensive tactics are ignored. This is a huge problem. In most cases we are adjusting to a situation after the fact, defensively. Of course, there is another side to the story. What are the disincentives to innovation? Those who read the debate in ELET ES IRODALOM called "How Rich We Are" and those who watch the shows on television can see that the introduction of anything new is accompanied by a great deal of turbulence, conflict and resistance. When we see this on the level of day-to-day experience, the assumption is that bad faith or bureaucratic obstacles are involved. Once we look at this more closely, we see that something else is happening. This is only an inessential element. What is much more important is the fact that innovation runs counter to very powerful interests. When a new product or a new process is introduced, this impacts the inventor and the customers of the old, established process, competing enterprises or the interests of other enterprises that have already received support. The purchase of the RABA-MAN license has hurt other enterprises and closed off other opportunities. The opening of one door immediately closed off other opportunities. But the introduction of innovative techniques runs counter to other interests also. The transition from the old procedure requires training, manpower redistribution and often learning a new trade. It implies human adjustment on a much larger scale than one would think. But there are additional interests that may be hurt. When an enterprise begins to do something totally new, its cooperative relationships with other enterprises will undergo some changes. Well-established, routine interpersonal relationships were almost certainly sufficient to take care of day-to-day business. When something new is started, it is necessary to rebuild those systems of interpersonal relationships. This involves enormous risks. A great many things must happen at the same time, in a coordinated, regular manner. If just one of these is not available, then even the most well-intentioned manager may have to take a fall, even if the plan was quite correct. The same can happen to a foreman who has become skilled at making five products and alternating them whenever there is a shortage of materials. With a full transition to something new, all of these processes will suddenly change, there will be more unused capacities, the rush will get worse, workers will be more upset and stress will increase. In other words, disincentives are also quite substantial. Thus, the process is accompanied by incentives, disincentives and conflicts. The implication is that, in speaking of the question of economic innovation, it is not possible to separate new products and new technologies from the capacity of the entire society to renew itself.

[Jeno Andics] In principle, it is true that technological development is in the interest of all enterprises. In principle. In practice, however, the dominant interest of enterprises is to be successful and to survive. The key question is how they can be successful and to survive. From the standpoint of enterprises the worst situation is when they have to carry out intensive technological

development within the enterprise, as the discussion by Antal Laszlo has shown very clearly. This will lead to a breakdown of internal relationships and a sharpening of internal conflicts. For this reason, the ideal situation is when they do not have to do this. The reason for the slowness, low propagation speed and humiliations characterizing the innovative processes of the Hungarian economy may in part be found in the fact that enterprises become successful and survive by doing what the environment expects of them. In the last decade and a half, the Hungarian economic environment has not required continuous innovation as a prerequisite of success and survival. An enterprise operating in a relatively comfortable manner, not engaged in any substantial technological development, could very well be successful and profitable. Thus, we arrive back at the problem of a market environment. We must see that in a merchandising-based economy it is the market that decides which innovations are to become successful. Whenever the market is willing to recognize unsuccessful innovation or non-innovative enterprise policy, we see a slowdown of innovation and technological development. This will lead to a number of individual grievances, although I think these are present even in the most dynamic economies.

[Zolt Papp] The daily papers published a news item to the effect that the ARASYKALASZ Cooperative of Rackeve has opened an innovation bureau. What does this mean?

[Zoltan Meszaros] One of the fundamental problems is the methodical separation between research, development, production and trade in the industrial sphere. We look for science and research somewhere in the cultural area, development and production are considered economic categories while trade is again a relatively separate sphere. When such innovation bureaus are established, and I wish them much success, I, as a member of industry, am rather embarrassed. In a much discussed lecture, Tibor Vámos suggested that our country should become an "artisan" of the world. We could do it if our big enterprises become capable of innovation; if we could tackle these questions in big enterprises and not only in "flexible small enterprises". We have our own innovation bureau in Chinoin; even if it does not operate very well all of the time, we still have it and we keep trying. In my view, the problem is still the separation of the systems of institutes, enterprises and marketing organizations. Research institutes often carry out research projects even though their results are not being utilized. Why are they not utilized? Because a large enterprise is unable to assimilate the results of scientific research unless it has its own R and D oriented organization. Otherwise it does not have the people who are able to understand and adapt problems, whether the results are coming from the outside or the inside.

[Tibor Vámos] Some of the language being used, I am afraid, may create some misunderstandings. The "small-industry component of international cooperation" does not imply small scale operations. The "small producer" component of industrial cooperation is on a scale that corresponds to the big factories of the Hungarian pharmaceutical industry. The point is that we can and must specialize. Primarily but not exclusively. There is another point I would like to clear up. The problem of innovation is now at the center of attention in this country and the debate is beginning to be overdone. Everyone has his own ideas about the best

solution and about the ways to connect various systems of incentives. There are a number of desires, especially in literary circles, that are similar to the patterns used in the 1930's. The pattern goes as follows. There is the progressive innovator; in general, he is helped by a girl wearing a red cap. There is the "enemy hand", the bureaucrat, who is blocking their way. In the end, the thing goes through because someone somewhere makes it possible for the innovation to be adopted. This pattern is reemerging slowly, with the roles recast for a different world. The situation is much more complicated. In order to make Hungary more efficient, to coordinate the incentive systems of enterprises and the administrative units within them, to create a general infrastructure in industry that can lead to a degree of harmony in conditions, what is needed is thorough, structured analysis and hard work, not just one-time demagoguery about "sweeping away bureaucrats". Of course, I do not want to defend bureaucrats here.

[Zolt Papp] In any case, the point of this discussion is that the factors obstructing technical and economic change are mostly outside of technology and economics: they require changes in social conditions. The question is: when is a system innovative in social terms? What is our mechanism for handling clashes and conflicts of interest?

[Mihaly Bihari] It has been said that innovation processes always affect existing interests and engender opposition and conflict. These clashes and conflicting interests must be handled somehow, using one mechanism or another. I think that we have not yet learned the techniques for discovering, eliminating and resolving conflicting interests. What internal changes are necessary to eliminate the factors which are obstructing rational functioning of the technical and economic sphere? Briefly, I must say that the required changes are in the area of governing society. We have not yet talked about a special sphere of innovation: that of innovation in government and leadership. Quite often even scientists hold that innovation involves only economics, engineering and technology. It involves inventing, developing and producing a product and achieving market acceptance for it on the basis of a positive value judgment. Yet, new intellectual products exist also in other spheres of society, such as culture, art, government and politics: they must also be discovered, tested and introduced. What is the meaning of innovation relative to a system of government and administration? It means the formulation of a new social and organizational system appropriate for new administrative and governmental tasks. This is the first point. The second is that, just as economic and technical innovation is tested by the marketplace, some kind of feedback mechanism is necessary to test governmental innovation. This is a wider feedback medium than the marketplace: it involves the entire society in the feedback mechanism. This implies democratic checks and controls of social policy. In my opinion, innovative procedure on the governmental level involves three basic changes. One is the separation of politics from operative decisionmaking, starting from the top level. It is recognized even in our own society that operative and political decisions are often mixed up. In most cases, people on lower levels are attempting to separate them from one another. But the whole determines the parts, not the other way around. Thus, only when operative and political decisions are separated at the top level where the whole picture is being considered will it be possible to attempt to separate

political and operative decisionmaking on the middle and lower levels. This does not reduce the importance of politics; instead, political decisions are put in their proper place while at the same time operative management and administration will enjoy greater freedom to make their decisions. The second innovative opportunity to improve the operation of the governmental sphere is very active, effective and strong decentralization of decisionmaking processes. The third is the creation of specialized apparatus independent of government authorities to complement the advisory apparatus of government bodies engaged in decision preparation. This is needed because, in my view, the official specialized professional apparatus of government bodies is the main factor limiting political decisionmaking. Due to their special dependent relationship, they consider political decisions within a very narrow framework of possible alternatives. The alternative political decisions prepared by these groups are then presented to decisionmaking bodies; often they represent a narrow range of alternative ideas for the political sphere. In my estimation, these three innovative ideas may potentially contribute to a renewal of the system of government.

I would like to add that changes in systems of government and leadership represent the most difficult task for society. When changes are introduced in the system of government and leadership in small doses, step-by-step, the attempt will fail. It will fail because the targeted entity (the organizational and government system to be changed) will assimilate or, to use a rather ugly expression, gobble up these small reforms. Because of this, only thorough and radical changes, accompanied by stability, were ever able to successfully change systems of government. The most important of these innovative changes on the government level in the last 25 years was the new reform of economic decision-making introduced on 1 January 1968.

[Jeno Andics] It must be emphasized that there is no technical progress or innovative activity without conflicts. It is not possible to avoid conflict within enterprises; it is also impossible to avoid conflicts on higher levels. Innovation must be considered not only on the enterprise level but also on the macroeconomic plane; when we do this, we will inevitably arrive at the problem of the administration of the state. The process of technical development will inevitably lead to structural reorganization of the economy. Without it, technical progress is impossible, as shown by international experience. The labor force must be mobile, careers must be modified, new careers begun, enterprises may have to be cut back, because innovation in an economy implies stagnation or decline of a number of enterprises.

This means that accelerated technical progress will lead to the sharpening of a number of macro-level conflicts due to the fact that some very well-defined interests may have to take a back seat.

The kind of innovative activity discussed by Mihaly Bihari is necessary mainly in order to ensure that society will be able to tolerate and handle conflict; so that conflicts may be mitigated and solved on the basis of collective wisdom.

UTILIZATION OF DOMESTIC NATURAL RESOURCES

Budapest FICYELO in Hungarian 10 Jun 81 pp 1, 3

[Article: "The Utilization of Domestic Natural Resources"]

[Text] The 20th Conference of Economists has been set for June 15-16 in Tatabanya by the Hungarian Economic Society, the Organizational and Management Science Society of MTESZ [Federation of Technical and Scientific Associations], the Economic Steering Committee of TIT [Society for the Propagation of Scientific Knowledge] and the Konaron megye organizations. The Conference will discuss the possibility of better economic utilization of domestic natural resources from many points of view.

At this time we shall glean from the Conference reports, and in so doing, we would like to promote wide discussion. (We are reporting on one of the lectures from the agricultural section on page 11).

Jozsef Bognar, the director of the Research Institute for World Economics, will give a report on the situation in the natural resources and the course of action to be adopted to it.

The Economics of Consumption

In connection with a reevaluation of our domestic resources, the science of economics must develop new concepts and methods to integrate the problems of the natural resources into the economic system. Certainly this involves the emergence of a whole series of research, investment, production, by-product usage, conservation, shipping, developmental, consumption and sales problems, and these processes will also affect the manufacturing industry and the world market.

However, it is obvious that the new circumstances of humanity will call for a system of deliberation to consider natural resources in an alternative way, as expendable potential in the system of interaction, will

give due consideration to their restricted past history in the national economy, will assure their maximally thrifty utilization on the worldwide level, and will preserve the resources and the environment.

Two of the three most important technological trends in the decades facing us must be implemented in the area associated with natural resources, their problems will determine our type of economic progress and its order of magnitude, and these questions will decisively affect the climate of cooperation between the world economy and the national economy, although this may frequently be temporary, especially in the political and military (security) sphere.

There is a widespread opinion that greater possibilities exist in energy conservation than in increasing the production of one type or another of energy resources. Therefore, in the interests of a reasonable energy policy, every factor and source of loss must be re-examined: production and shipping losses, the production structure of industry, the various changes in the development of agricultural production, domestic output, the effect of construction methods on energy consumption, the export-import structure and so on from the viewpoint of energy requirements. In the case of improvement in consumption economics, the possibilities for cooperation and collaboration between the science of economics and the technical sciences or those dealing with the natural resources are multiplying, but these processes must be developed and modified on a logical basis, collectively and with comparable methods, in almost the entire economy (including the microeconomy).

A correct system of policy and action requires foresight, purposefulness, "updating" and extraordinary flexibility.

Thus in the interests of guaranteeing our own future and progress in a changed world, with respect to the question of natural resources, we must develop a new policy, a new system of evaluation, motivation and action. We must begin the realization of this new policy under the circumstances and terms of the Sixth Five-Year Plan, which makes this task more difficult, more complex and more inconsistent. However, in addition to emphasizing the risks, we must point out that the new national and international economic policies associated with natural resources are beginning to develop in the midst of serious tensions, conflicts, risks and hazards throughout the world.

During the Sixth Five-Year Plan we must develop programs of activity,

--The inevitability of which economic and political leadership has not recognized in the past or was unable to tackle, and

--Which have become necessary as a result of the new circumstances which have developed in the world economy.

In the case of a consistent and aggressive foreign economic policy, it is improbable that we can match the increase in energy and raw material prices by similarly raising our export prices, which would require not only an acceleration of our technological development, but also an intensive development of our sales ability. A shortage of funds, especially under socialist economic conditions, also means a lack of flexibility and ability to change. There is a very schematic way of thinking which sees flexibility only in terms of the introduction of economic forces and effects. Even if we correctly perceive the world economic challenges, we may become incapable of taking steps and measures, if we do not have suitable reserves available. For our part, we can only improve if we inject the influence of world market effects into the Hungarian economy. However, the goal is not a better preception of effects, but the choice of suitable action. Nevertheless, secure liquid assets form the condition for choosing rational action.

Long-range comprehensive and coordinated programs of activity are necessary, and they must embrace the complete vertical structure of the problems, from research through production to consumption in connection with the development and conservation of our natural resources. The development of such programs of activity can only be realized in an intricate way in the economic policy sense. In every phase of program development there must be close cooperation between geologists, miners, economic geographers, biologists, hydraulic engineers, agronomists, engineers and economists, so that in every phase of the vertical process we can reduce loss and improve the efficiency of the entire structure.

Variations in Output

László Kapolyi, the state secretary of the Ministry of Industry, will give a report on several fundamental questions of mineral resources and energy management. Among other things he will call attention to the fact that, under the effect of changes in foreign and domestic conditions, according to 1973-1980 factual data and preliminary calculations, the increasing energy consumption will require less and less of the growing national income. According to calculations not yet completed and to newer energy concepts, the amount of energy needed to increase the national income by 1 percent can continue to decrease and, instead of the 0.7 percent additional expected in the 1980-2000 period, a ratio of under 0.5 percent can be attained.

The primary task of managing raw mineral resources and energy in the area of optimizing production organization is to develop variations in production. If any external condition or a complete set of them develops differently from the forecasts, it may be necessary to re-evaluate the management of mineral resource output and to develop an essentially new strategy to replace the solutions already in operation. This step should be taken at any time if, on the basis of earlier predictions, the modification means the most favorable changes for the national economy based on a

comparison of expenditures still avoidable in developments in process, developmental costs of a new modification promising savings, and results to be anticipated from both procedures.

It already appears certain that the proportion of coal, for example, in satisfying energy needs, will decrease more slowly than previously assumed and may even increase temporarily, because of economic and other considerations connected with the use of nuclear energy and the well-known problems of producing and pricing hydrocarbons.

The basis for the domestic mineral wealth of coal is the workable coal deposits of 3.6 billion tons, which could be sufficient for approximately 120 years at current annual production. Of this 13 percent is bituminous coking coal, 22 percent is brown coal, and most of the rest is lignite suitable for surface mining. Although the output data for domestic coal deposits are not very favorable in comparison with the large output abroad, they do present the possibility of economic electrical energy production, not only compared with imports, but also with domestic nuclear energy.

In his report László Kapolyi will exhibit computational material for establishing a forecast, interesting from a methodological point of view.

He begins with forecasts on agricultural development, namely that grain exports will increase from the current 1 million tons annually to approximately 6 million tons by the turn of the century.

Calculated in constant value dollars and taking the perspective world market prices of wheat at \$200 per ton, fuel oil at the same \$200 per ton, and nuclear fuel at \$1,200 per kilogram, the extra 5 million tons of wheat exported will be equal in value to 5 million tons of fuel oil or an annual 750 tons of nuclear fuel.

According to the figures in an OFMB [National Technical Development Committee] study prepared recently, 1 ton of imported fuel oil can cost at most 3,800 forints, while 1 kilogram of nuclear fuel can cost a maximum of 60,000 forints, if we do not want the cost of domestically produced electrical energy to cost more than the electrical energy produced from domestic coal. If we divide these costs by the prices of fuel oil or nuclear fuel as above, in the first case the foreign exchange-producing income limit will be approximately 20 forints per dollar, or 50 forints per dollar for nuclear fuel, which could not be exceeded by the grain production surplus covered in the exchange costs. If we consider the fact that additional grain production also requires investments, and if we also consider the interest burden on them, the specific cost in the grain production increment will probably be greater than the current 3,200 forints per ton. Thus we may say that the foreign exchange

producing cost of the surplus wheat exports will probably exceed the foreign exchange-producing cost limit of 20 forints per dollar for imported fuel oil. Thus we can draw the conclusion that it will not be expedient to sell the surplus wheat exports for hydrocarbon imports to be used for energy purposes, because it is simply more economical to replace them by domestic coal or nuclear energy.

The foreign exchange-producing expenses forecast for an increase in grain exports also fit well within the foreign exchange-producing expense limits of 50 forints per dollar for nuclear fuel, but it may happen that the surplus wheat exports can be used more expediently to procure other imported goods and, thus, instead of electrical energy based on fissionable material, the preference might have to be awarded to domestic coal.

Not only the efficient development of coal, but the efficient development of the domestic output of mineral resources in general, will not endanger, but will rather promote the development possibilities of exporting branches. Otherwise it would also be necessary to import raw materials which could be procured domestically, for the most part with greater operative and construction capacity expenses needed to offset them than domestic resource output would cost.

In his report Miklos Toth, the deputy chairman of the Geological Office, will deal partially with this same set of questions. His report will deal with taxonomic and methodological questions in the measurement and evaluation of natural resources. He will also point out that the value of natural resources (the discriminating funds suitable to differentiate the value and costs of the productivity achieved from them with the use of optimal technology) is not affected exclusively by the world price for the products made from them. It is also necessary to note how the costs and the world market prices for the exchange commodities from the manufacturing industry develop. The increase in the foreign expenses per unit dollar value of manufacturing industry goods can also raise the price of natural resources.

Thus, if we could classify and portray the production to be achieved in a definite perspective period in accord with the expense per unit dollar value, the marginal foreign exchange-producing expenses of the exchange commodities from the manufacturing industry for the same period would define the optimum utilization of some natural resources by the intersections between the classified output possibilities and the rising curves.

The Theoretical Bases of Evaluation

Kalman Szabo and Ferenc Fekete, students at the Karl Marx University for Economic Studies, will report on theoretical questions in the economic evaluation of natural factors.

In general a theoretical economic foundation is indispensable for a system to evaluate the efficient management of resources, especially natural elements. For this purpose it is not proper to disregard the traditional (Marxist) work value principle established by analyzing early situations, but it is not proper to use it with formal references either. It is necessary to be concrete and to adapt the previously advanced theory--and this is possible--to the circumstances which have changed substantially since that time in the process of socializing production.

If certain production factors, as matters of management, become permanently limited and monopolistic with elements distinct from one another in quality and status, the consequence will be that--although in principle their nature should not change--the national economic "specific weight" of the concrete types of work will increase, and the standard expense will not be typical, but will deviate toward the most unfavorable producer: the false values give rise to discriminating funds.

If we take as a base a non-monoculture situation deviating from the classical model (which meant wheat at that time), i.e., if we devise a multi-branch model more in keeping with our current situation, we must not only consider agriculture but also the relationships between mineral and energy resources acquired with differing technologies with a realistic chance of continued monopolization caused by restricted replacement opportunities in actual use.

Under today's conditions, and this will be quite valid for the intensive period which our economy is entering, essential differences can develop in the long run with respect to some branches and to the quality characteristics (nature of intensity, complexity, innovation) of the concrete jobs performed between some steps in the vertical system. However, this has an effect on value: expense, expressed in the unit time of the social work base, forms a greater social value in a "more noble" sphere than in the case of a standard sphere. Thus in the above value constantly increases (the specific value drops at a slower rate than the expansion in the production volume). This again must make way for income formation, naturally in view of the fact that some of the surplus can be redistributed in prices, e.g., as a function of interbranch differences in fund stability.

A riskable hypothesis is that when the time needed for any radical modernization and the life span of the new products cross several reproduction cycles, the innovative ability can become monopolistic as a permanently limiting factor, and the rising innovative value can become an absolute or a distinguishing permanent extra profit, retaining funds. According to this in principle successful innovative modernization in the domestic production and manufacturing phases can compensate for natural disadvantages.

Among other things this stems from the fact in elaborating long-term progressive variations and strategic alternatives in the comprehensive

economic policy it is necessary to place in one pan of the scale the stabilizing effect of the "ancient production" and the need for concomitant distinguishing fund formation, and in the other pan the chances of being able to produce and realize gainful, effective surpluses including national added value portions in the vertical manufacturing system and in spheres remote from them.

Preferential Credit

One of the goals stressed in the Sixth Five-Year Plan period is the energy conservation program, important parts of which are actions resulting in energy savings or an economic exchange of energy resources. Attila Csérnok (MNB [Hungarian National Bank] deputy chairman) spoke about the credit policy operations for this in his presentation.

Preferential investment credit is guaranteed to help in moderating energy consumption:

--For those investments in which a saving in energy resources annually is at least 20 percent of the investment in forint values calculated at producers' values, i.e., if the investment is compensated for in 5 years, credit with preferential interest can be extended for a period of 10 years,

--For those developments in which all of the investment is compensated for from energy savings in 3 years, the bank can grant a credit line increasing convertible export commodity funds with a 12-year maturity and preferential interest terms, and

--The bank can guarantee special credits of 300 million forints for 1981 in order to finance industry developments aimed at improving energy consumption.

In view of the national importance of energy savings, the bank is anxious to assert energy savings viewpoints in judging any developmental credit requests.

At the end of last year there came the new appeal for applications to prepare for the implementation of investments resulting in energy savings and to stabilize the forms and conditions of financial support requested. Despite the appeal for applications, interest in the MNB is remaining well below what is desirable, while the AFB [State Development Bank] has received applications giving evidence of an unusually large demand. From this it may be concluded that the enterprises would primarily like to finance their energy savings investments from external money with "softer restrictions."

Along with incentives for the economic management of energy resources, the bank stresses the economic utilization of domestic mineral resources, but treats this as a closely associated task.

In the bank counseling area the bank experts jointly seek with the enterprises:

- Possibilities for increasing quality coal deliveries,
- Methods to further process petroleum products,
- Methods to increase aluminum processing with a high degree of finishing, aimed at economic and increased production of bauxite resources,
- Possibilities of utilizing scrap and secondary raw materials,
- Examination of the conditions for economic consumption of the domestic lignite resources, and
- Analysis of mine management in order to increase the output of copper and other mineral resources.

Secondary Raw Material Reserves Significant

In his lecture Ferenc Spisak, the deputy chairman of the National Material and Price Office, concerned himself with the utilization of scrap and secondary raw materials. Everyone in the world knows that scrap materials present a source of raw materials which can replace raw materials. In this way it is possible to alleviate worries about the supply of materials and availability of energy. The Soviet Union, the GDR, the United States, the FRG, England, France and so on aid in the recycling of scrap by means of significant state supports and tax preferences.

The importance of this has also been emphasized in our country, and party and government resolutions have been issued for the purpose of increasing scrap collection and utilization activities because, for example, 4 tons of iron ore and 2 tons of anthracite can be replaced by 1 ton of scrap iron.

In Hungary the proportion of discarded scrap collected is low. The proportion of iron and metal scrap collected is comparatively favorable, 80-90 percent. On the other hand other scrap materials are very low: compared to the initial stock, 28 percent of paper, 2 percent of used oil, 4 percent of plastics and 6 percent of rubber scrap are collected.

These few data demonstrate that our country has significant secondary raw material reserves, the utilization of which can help greatly in relieving worries about raw materials, in conserving energy and in protecting the environment.

The social program of the TB [Economic Committee] and the Council of Ministers, stimulating the utilization of secondary raw materials, is intended to change the situation outlined above. The program anticipated the collection of scrap from iron, non-ferrous metals, paper, textiles and plastics, used oil and worn-out tires, the development of recycling, and the processing of the materials found in iron foundry slag heaps. As a result of this development, sales transactions in secondary materials will be 82 percent greater in 1985 than in 1980, calculated in constant prices. This will permit the proportion of secondary raw materials

in industrial usage to increase from the current approximate 2-3 percent to 4-5 percent in 1985. The implementation program will involve investments totalling 10.2 billion forints and the development of working capital. The investments will be compensated for within an average of 3.5 years.

The development of this activity is favored by the fact that the price adjustment adapted to foreign trade prices has considerably improved the interests of the collecting and using enterprises, while the increased profits give them a method of significantly developing their own base. The collection-procurement price increase also has a favorable effect.

The Hungarian regulation system also encourages thrift with respect to materials and energy by means of a reduction in prime costs achieved through materials and energy savings, thus increasing the profits of enterprises. The price system particularly stimulates the utilization of production scrap and secondary raw materials, since goods produced by using them can be sold at the same price as products made from regular raw materials, if their properties are identical in quality and use value to those of the products made from regular raw materials.

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REFORM'S IMPACT ON ENTERPRISE INCENTIVES ANALYZED

Budapest FIGYELO in Hungarian 17 Jun 81 p 7

[Article by T. Katalin Forgacs: "The Interest System for Factory Units; A New Internal Mechanism at the BUBIV"]

[Text] A few years ago 2-3 units of the nine factories of the Budapest Furniture Industry Enterprise (BUBIV) provided 75-85 percent of the total profit of the enterprise. This state of affairs has ended. It now has six factory units providing profit of the same magnitude. This has unambiguously increased the load-bearing capacity of the enterprise.

This noteworthy achievement can be attributed primarily to the new internal guidance system of the BUBIV, to the changed interest system of the factory units, the basic pillar of which is the new price and cost accounting system.

Amalgamations and Specialization

The BUBIV is a true large enterprise. It now creates a production value of about 1.4 billion annually. Of this value 950 million is for domestic consumption; contracting activity accounts for 130 million; 100 million is capitalist export; and 230 million is socialist export.

As is well known, many large enterprise organizations came into being in the 1960's and 1970's simply by having an enterprise which was of outstanding importance in its field of activity bring other units under its guidance--generally joined to it by a higher decision. Large enterprise centers developed quickly at the same time leaving largely untouched the leadership organization of the several factory units. This system, in which the right of preparing independent balances for the factories was considered superfluous, could obviously be clumsy and expensive.

At the BUBIV it was recognized that a priority condition for further progress was the development of a large enterprise internal guidance and interest system.

The leadership of the enterprise prepared an action plan to improve efficiency in the 1970's. Within the framework of this, several factory units were combined and a few were abolished. Specialized parts supply for furniture manufacture by the entire enterprise was developed in one of the largest factory units and the

production of finished goods was gradually concentrated in six sites in various parts of the country. This activity--whereby a truly organically coherent large enterprise is being created--is continuing in the 1980's.

The basic pillar of the entire internal accounting system is the method of price formation, realistic calculation. The prices used by the factory units are not internal accounting prices but rather prices based on realistic calculations. Thus they do not simulate the economic medium but rather let it have its effect on the factory units too. Obviously as a result of realistic prices, the results achieved reflect more or less faithfully the efficiency of the work of the several factory units. (And the profit which develops at the factory unit plays an important role from the viewpoint of factory unit wage development and shares fund generation).

Price Proportioning--Within the Enterprise

Thus the price of every internal cooperation product and of every part is formed on the basis of those principles on the basis of which the price of the finished product is calculated. The products of the factories are exchanged among themselves on the basis of a limited production cost and every quarter the center transfers to the factories the planned cover. A basic tool for internal price formation at the BUBIV is the attempt to perfect price proportioning within the enterprise. This means that they want to ensure at the enterprise level that every unit should manufacture all products with the same material prices, building the same waste percentage into the material content. Direct wages uniformly everywhere provide the basis for dividing up overhead. Thus they calculate overhead proportional to the material-free direct costs. These two factors--direct wages and the overhead divided up as a function thereof--are together the basis for breaking down by product the profit calculated proportional to assets.

When determining the value of the work time needed to produce a product, they see to it that the same hourly wage is used to account for the same operations in the price of the products. The time unit for the work operation must be the same too, independent of which factory the product was produced in. But the size of the overhead differs from factory to factory, and the spread is very large. The differing overhead ratios must be taken into consideration when calculating the profit plan figures--because of the factory material interest system.

Beginning in 1980 the producers prices and consumers prices for furniture went into the free price form. In order to conduct price discussions successfully the central commercial directorate of the BUBIV needs so-called limit prices; it must know the lowest producers prices at which it can sell the products because these guarantee the normative profit approved for the factory units.

The factory units can generate the enterprise limit price by taking into consideration the material and wage norms approved for enterprise price formation, their own operational and factory unit overhead keys, the general overhead and segregated cost proportion for the enterprise and the 2.6 percent sales receipts proportional profit.

The factory units cannot carry out price increases independently until they have reported them to the center. And the center determines the profit key, which is a percentage calculated back from the price of the finished product.

As for profit, fulfillment of the profit task planned for 1981 provides, uniformly for the enterprise, generation of a 0.8 percent wage proportional shares fund. Thereafter every 1 percent fulfillment of the profit plan generates an additional 0.04 percent wage proportional shares fund. If the profit plan is over-fulfilled the factory units can dispose of a maximum of only a 1.6 percent wage proportional shares fund. Whatever exceeds the 1.6 percent is withdrawn by the center since the enterprise is obliged to pay a tax above this amount.

Centralized and Independent

As we have seen, the guiding role of the center is quite large in price formation and in the development of profit. The chief aspiration in this question is not so much to increase the independence of the units as it is to ensure clear economic vision. In what questions is the independence of the factories considerable?

The parts manufacturing unit in Rakospalota--one of the most important factory units--has received, for example, a free hand in acquisition of raw materials. It buys from Erdert (Marketing and Stockpiling Enterprise for the Forestry and Lumber Industry) or from the Lumber, Sheet and Barrel Industry Enterprise depending on which acquisition source proves more advantageous.

For the time being the factories receive from the center, as norms, orders of magnitude for unfinished production and material reserves. But beginning in 1982 the enterprise wants to gradually transfer to the factory units management of purchased reserves and wants to limit the sphere of materials falling under dual guidance.

The factory units also have relatively considerable freedom in selling products produced above the plan.

Since 1978 the annual enterprise plan at the BUBIV has been prepared by means of multi-step iteration. In April the center determines the chief plan goals for the following year; during May the factory units and the functional guidance departments collect and send in the information needed for the plan goals. In June the factory units prepare their own production plan proposals--in several versions. During the summer and fall the plans are coordinated and a summary enterprise plan is prepared.

The plan is implemented by having the factory units, with the help of the central commercial directorate, sit down every quarter to discuss with one another and sign contracts for deliveries in accordance with the plan. (The interest of the leaders is connected to fulfillment of the contracts).

If the factory units cannot agree on a price, then production above the plan does not have to be transferred internally, it can also be sold to outside customers.

Beginning in 1981, in the interest of making enterprise operations more flexible, the center is providing to the factory units developmental funds which they can dispose of themselves. The enterprise determines the size of these separately every year. The source of the developmental funds for the factory units is amortization and profit prior to the year in question. The factory units can use these funds for maintenance, for rationalization and to augment the circulating fund.

Larger developmental resources will continue to be managed centrally and if any factory unit wants to carry out a larger development, then the separate factory unit fund can be included in the financing of the development.

There can be no doubt that the factory units have relatively many obligations in wage management. But this is not so much the fault of enterprise thinking; the limits are dictated to a much greater extent by the wage controls valid at the national economic level.

The interest system of the factories was changed on 1 January 1980. Deviating from the practice of earlier years they introduced wage fund regulation tied to performance rather than wage level regulation tied to performance. The wage development indexes linked to factory interest are developed by breaking down to the factory level the profit indexes of the wage fund regulation system tied to the performance prescribed for the enterprise. The factories prepare independently their annual personnel and wage management plans and they can increase, also independently, their base wage funds, tax free, in accordance with the coefficient determined as a function of the percentage change in bulk profit. But this freedom is limited; the factory units can carry out on their own authority a maximum of 6 percent wage level development on the basis of the possibilities.

Authorization by the director general and the shop stewards' body is needed for a wage development exceeding this. There is another limit; the factory unit can use all of the wage fund savings deriving from a personnel reduction up to 2.5 percent in order to increase the wage level. But the enterprise withdraws the wage fund for personnel reductions exceeding this--or the factory unit can generate a wage fund reserve for the next year from this. On the other hand, the factories are not bound in regard to how much of the possible wage development they use to increase base wages and how much they use for sliding wages. The factories decide independently in this question. In the case of non-physical workers--if there is a reduction in personnel--they can use 25 percent of the wages of the personnel saved to increase sliding wages. There can be an increase in base wages, as a function of the development of the average enterprise wage development index, after the annual balances are closed.

After the annual balances are closed the enterprise gives an accounting to the factories concerning the indexes and orders of magnitude connected with profit and wage development.

INCREASED USE OF CHEMICALS REQUIRED IN AGRICULTURE

Warsaw TRYBUNA LUDU in Polish 5 May 81 p 3

[Article by Krzysztof Bien: "Agriculture Counts on the Chemical Industry"]

[Text] For many years, the conviction prevailed that the sole method of increasing yields in agriculture was systematically to increase the amount of fertilizer used. The view that agricultural crops are the result of many different factors, including mechanization, drainage, the use of chemical plant pesticides and, of course, fertilization, was slow to win acceptance among the people. For the present, to underestimate a single one of them will ruin the effects of the others. The example of plant pesticides will serve to confirm this thesis.

The chemical protection of plants has been unusually neglected in our country. I am not going to provide vivid and undoubtedly somewhat demagogic comparisons of Polish agriculture with that of countries near or far. In the use of the so-called active ingredient of plant pesticides per hectare of arable land and orchards, we are behind all those who treat agricultural production seriously. The excessive "chemicalization" of food stuffs certainly does not threaten us for the time being, all the more so since, in fact, from year to year we use less and less of these chemical substances. Last year, it fell below 1 kilogram per hectare.

Scientists and farmers are alarmed: the shortage of agents for weed, insect and plant disease control is causing us huge losses. Last year, and I quote from a portion of a letter addressed to the President of the Sejm by the 1,100-member-strong group of scientists and technicians in the field of plant protection present at the 21st Symposium of the Institute for Plant Protection in Poznan which took place in February of this year, "...the losses due to carelessness in plant protection reached about 11 million tons of potatoes (massive occurrence of potato blight), around 4 million tons of grains and 1 million tons of vegetables and fruits." Not long ago, in the pages of POLITYKA, Prof Sz. Pieniazek stated: "...Not everyone knows that 30 percent, at times even 50 percent, of our crops fail due to disease and pests...."

Have we not been aware up until now of the need for the chemical protection of plants? On the contrary. In the programs worked out during the 1970's for the creation of conditions for the development of agriculture, great consideration was devoted to the question of production of plant pesticides. For example, in the program for chemicalization of agriculture from 1977, it states that expenditures

for the production of plant pesticides were to have reached 6.1 billion zlotys in the years 1976-1980. But we did not carry out either this program or others, for example, from 1974 or 1979 (leaving aside, of course, the question of their soundness or internal harmonization). During the entire postwar period we devoted barely 2.1 billion zlotys to develop the production of substances used in insect, weed and plant disease control.

As a matter of fact, the list of necessary small investments has been known for many years. More and more frequently, successive items are added to it which have to be either immediately repaired, modernized or closed down. Despite the passage of time, unfortunately nothing is retired from this list. For example, near the end of the investment program from the mid-1970's, there is only one large installation producing chlorovinphos [chloro-phen-vinyl-phosphorous], a licensed herbicide, with a capacity of 500 tons of concentrate per year.

Bearing in mind the wealth of programs up until now and present shortages when we speak of their realization, it is with reservation that we must look to the next program for developing plant pesticide production worked out last fall by the Ministries of Agriculture and Chemical Industry. Will it not also remain merely on paper?

If, on the other hand, they manage to carry it out, that would be an unprecedented event in the history of relations between industry and agriculture. The program consists of the modernization of 13 plants and the construction of eight new ones (among which the largest will be for urea herbicides) in the course of barely 5 years, by the end of 1985. Total outlays, including supplementary expenditures which will have to be borne by other branches in the chemical field, amount to nearly 10.5 billion zlotys. This sum is not large compared to many investment giants, but in the face of the present difficulties it is significant. If we do not solve this problem, the question will be what shall we eat.

The realization of this program still will not guarantee agriculture adequate weapons for its struggle against weeds and insects, nor eliminate growing imports, nor liquidate billions in grain losses. The authors are not in a position to promise this. They can only reduce to one-half the foreign exchange expenditures for plant protection in the next five-year plan, i.e., during 1986-1990. Incidentally, in the present year it will reach 180 million foreign exchange zlotys which, according to the estimate of agriculture, will meet only 60 percent of the stated needs.

The program worked out by agriculture and the chemical industry will show effects only after several years and we should be aware of this. The many years of neglect do not permit us to obtain quick results. Well, what about today? We are already well into the spring of 1981. How can we fight plant diseases and weeds when we do not have the wherewithall?

From available sources, it appears that we cannot squeeze any more out of the installations now producing plant pesticides, mainly in Jaworzno and Sarzyna. They lack the technological capabilities and there are more and more shortages. Furthermore, the production often defies the principles of work safety and environmental protection. It is good that--judging by the Ministry of Agriculture--there is at least no lack of desire.

Mutual courtesy aside, however, fulfillment of the plan for deliveries for the first quarter of this year is "not up to snuff." Of the planned 3,040 tons of domestic herbicides, fungicides and insecticides, agriculture has received 1,096 tons. To take the spray insecticides used in fruit growing and market gardening, as an example, supplies from Foschlor, Sadofos, Owadofos and Karbolina would be hard pressed to equal one-third of the planned amount. Supplementary imports from the CSSR, among other places, are not in a position to offset large shortages. There is also a shortage of fungicides, e.g., for the first sprayings of strawberries.

To turn the discussion now to grain, the supplies of seed dressing amounted to barely 74 percent of the plan for the first quarter of this year and was thus lower in terms of the needs of agriculture. These losses, in general, cannot be made up. More than once, farmers have had to sow without seed dressing. We shall see what grows.

The situation looks better with imports. What was purchased or promised by other countries is generally arriving without delays. Besides, imports are for the present the sole means of guaranteeing farmers these indispensable chemicals.

This will remain the situation for at least the next several years. Among others, the authors of the letter mentioned earlier have underscored this fact, emphasizing at the same time that "...prior to beginning production of our own, these agents must meet our need to protect all phases of plant production and not only the lines that have been most effective, as has been the case up until now. This principle cannot be indulged, for example, in the comprehensive protection of potatoes and grains..." Besides, it is important not only to find the financial resources for imports, but also to meet deadlines; in a single word, time. The fungi, weeds and insects will not wait.

A call for imports at the present time is a most popular thing. But have we another way out? Perhaps it would be better to purchase insecticides than to import enough grain to match the losses caused by shortages of chemical plant pesticides.

3290

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SOCIOECONOMIC CHANGES TRACED OVER 30-YEAR PERIOD

Bucharest REVISTA ECONOMICA in Romanian No 18, 1 May 81 pp 5-6, 16

[Article by Prof Constantin Enache]

[Text] Building socialism in Romania, a job of great complexity and extent, has meant carrying out profound changes not only in relations of ownership, in the material-technical base, in the development of all branches of the economy and in organization and leadership but also in the social area. For the first time in Romania's history, following prolonged revolutionary struggles against oppression and exploitation, the people who work, at the same time, have become masters of the means of production and beneficiaries of all the goods created in society. The Romanian Communist Party has given and is giving special attention to the human factor, to the evolution of classes and social categories, to their place and role in society, to the level of training and their living and working conditions.

As Comrade Nicolae Ceausescu, the party's secretary general, stressed at the recent congress of trade unions, "Together with the final elimination of exploitation and the establishment of socialist ownership throughout the economy and with the giant development of production forces and the great changes which have taken place in Romania's social structure, there has been a radical change in the appearance and nature of the working class, their having become a totally new class of complete owners of the means of production, producers and beneficiaries of everything being achieved in our society. The peasantry, intellectuals and other social categories also have seen a profound renewal, the worker-peasant alliance has been strengthened as the unflinching foundation of our new system, and, on the basis of the same interests and aspirations, the unity of all our people under the leadership of the Romanian Communist Party has been achieved.

Basic Changes in the Structure of the Employed Population

Quantitative and qualitative changes in the employment of the labor force are indissolubly linked with the innovations of great proportions produced in our national economy, particularly through implementation of the industrialization policy under conditions of scientific-technical progress. Romania's move from the situation of a country with a poorly developed economy, of a predominantly agrarian nature, to that of a country with a rising economy, with a more and more flourishing social life, naturally has been accompanied by changes in the structure of the employed population by branches and in the people's entire way of life. The growing shift of human activity from agriculture toward industry and other nonagricultural branches

has been a definitive element in the overall social changes, in close agreement with the country's economic development. Socialist industrialization, contributing to the continually higher technical supply of labor in all branches of the economy, at the same time, has been not only the factor of attraction as well as that of the availability of the labor force in other branches, that is, agriculture (see Table 1).

Table 1: Employed Population by Branches of the National Economy (Percent of Total)

Branches of Economy	1950	1960	1965	1970	1975	1979
Total employed population	100.0	100.0	100.0	100.0	100.0	100.0
Industry	12.0	15.1	19.2	23.0	30.6	34.7
Construction	2.2	4.9	6.3	7.8	8.1	9.1
Agriculture	74.1	65.4	56.5	49.1	37.8	30.7
Silviculture	.2	.2	.2	.3	.3	.3
Transportation	1.9	2.4	3.1	3.7	4.3	4.7
Telecommunications	.3	.4	.6	.6	.7	.8
Goods circulation	2.5	3.4	4.0	4.3	5.5	6.1
Communal management, housing other services provided (nonproduction)	.7	1.5	2.1	3.0	3.4	3.9
Education, culture and art	2.3	2.7	3.5	3.7	4.0	4.1
Science and scientific service	.2	.4	.5	.5	.8	1.0
Health protection, social assistance and physical culture	1.1	1.6	2.0	2.3	2.6	2.7
Administration	1.7	1.2	1.0	.7	.7	.6
Other branches	.8	.8	1.0	1.1	1.2	1.3

Source: "Statistical Yearbook of the Socialist Republic of Romania 1980," pp 112-113

The data in the table show the shift during the 1976-1980 five-year plan to the situation where the percentage of the population employed in industry exceeds that of the population employed in agriculture. Together with this, the number and quality of the working class, the leading class in our socialist society, also rose. In 1980 workers represented more than 80 percent of total worker personnel of 7.34 million. Along this line of idea we note the much more emphatic rise in workers: Compared with 1950 the number of worker in 1979 had increased 4.7 times, while worker personnel had recorded an increase of 3.38 times, while the total employed population rose 1.23 times.

As the party program shows, the working class honorably is fulfilling its historic mission in the leadership of the new system. Its basic role also is determined by the fact that it is linked with the most advanced means of production and implementation of the achievements of the modern scientific-technical revolution. The working class has a decisive contribution to formation of the national income and to the implementation of our society's multilateral program.

The cooperative peasantry, although numerically it is smaller--from 4,568,200 in 1962 to 2,307,300 in 1979--at the same time has seen qualitative changes in its general training, in the role it fulfills in society and in its way of life. Together with the creation of the great socialist ownership in agriculture, the peasantry has

become a new class, owner and producer at the same time, which holds an important place in Romania's economic development. In the current stage, in accordance with the role of agriculture as a basic branch and the decisive role in all the country's social-economic development before which new tasks are rising, the peasantry's role continues to rise; together with technicians, specialists of a high level and other workers employed in agriculture, it is being called on to contribute fully to the achievement of a highly productive agriculture and to implementation of the new agrarian revolution. Thus the peasantry continues to play a role of the greatest importance both in the production of material goods and increase in the national wealth as well as in the leadership and implementation of the entire job of socialist and communist construction.

The changes in the social configuration also bring out the numerical and qualitative rise in the intellectuals, linked through the ideals of the masses' aspirations, life and struggle for the progress of all the people in the process of creation of the new society. The intellectuals, who for the most part come from the ranks of the working class and cooperative peasantry, are actively participating in material production and in the entire spiritual and social life of our people and the general progress of society. As the party program stresses, the role and percentage of the intellectuals in the framework of the nation and all social-economic activity especially increase under conditions of the modern scientific-technical revolution, the transformation of science into a powerful production force and placement of the most advanced achievements of science and technology at the base of all our development. At the same time, a new organization of the intellectuals is taking place in accordance with the very demands of the national economy, now in full progress. We note an increase in percentage of scientific researchers and, at the same time, scientific work in total personnel with higher studies.

Clearly, under conditions of the stress on qualitative aspects, within the orientation for Romania's social-economic development in the current and long-range stage, the trend for shifts in the structure of the labor force will closely follow the organization of the branches and subbranches of the economy. For that reason, we also should expect a rise in number of those working in the peak branches of technical progress, who provide superior utilization of natural resources, as well as in the branches intended to amplify the base of our own raw materials, even to the detriment of certain energy-consuming branches, whose production even at the world level is seeing trends of being restricted. The complex nature of social-economic development in the branch type, taking into account the broad diversity of uses and socially useful work also means other changes in the structure of the working population. Under the influence of scientific-technical progress, we find the extending and diversification of certain services and, as a result, a rise in the number of those working in such activities. In this regard, in table 2 we present the distribution of the population working by three sectors:

Table 2: Structure of the Working Population--by Sectors of the Economy

	1950	1960	1965	1970	1979	1980
Total working population	100	100	100	100	100	100
Percent in primary sector*	74.3	65.6	56.7	49.3	31.0	29.0
Percent in secondary sector**	14.2	20.0	25.5	30.8	43.8	71.0
Percent in third sector***	11.5	14.4	17.8	19.9	25.2	

* Agriculture and silviculture

** Industry and construction

*** Remainder of economic branches

The increasing percentage of the labor force working in the area of services still is an expression of our economic and social development and rise in the general level of civilization and is becoming possible according to the rise in labor productivity in the area of material production.

In the general picture of the social changes in Romania we also should mention the growing affirmation of women in the economic, cultural and social-political activity as a result of the party's policy to promote full equality of rights without regard for sex, nationality and so forth. We should note the rise in percentage of women's work in total social labor and their contribution to Romania's general progress; in total worker personnel women represented 37 percent in 1980. Without neglecting certain particularities in the female labor force, we emphasize that currently we have found a trend of extending it not only into the branches considered as "traditionally female ones" but also into the other branches of the economy.

A New Human Quality.

The social changes in Romania cannot be understood fully without knowledge of the aspects which view the quality of the people themselves, the level of instruction and education and, implicitly, their behavior. The people's ability to give quality to the products of their work, to judge and give valuable ideas which push forward social production depends on their professional and political training, on their level of awareness and their spiritual development.

Here we should stress as a definitive feature of party policy and concept of its secretary general, Ionilă Nicolae Ionescu, in the area of formation of cadres the rise in the role of the school as a main factor in the instruction and education of the young generation and training of all categories of workers. Going through the compulsory 10-year education is intended to provide a unified scientific and general cultural training for all the young people, regardless of the later stage each one will follow in his professional qualification, thus its being a question of a much higher general quality of worker and, actually, of the entire population.

Referring to the working class, we mention the continued increase in the percentage of qualified workers in total workers and increase in the level of training in the broad diversity of profiles of industrial, construction, transportation activity and so forth and the large rise in their contribution to the development, organization and leadership of production. In particular, it should be noted that today the majority of young workers is represented by graduates of high school education, which reflects a radical progress compared with the past. In the 1978-1979 school year the graduates of high school education represented the highest percentage of total graduates of professional and high school education--69.1 percent--from which we see the growing trend in the contribution of high schools to the training of cadres and primarily the workers.

In the same direction of raising the quality of the people and their role, we also should mention the following aspects: a) The increase in percentage of workers in total number of workers employed in peak subbranches of industry--machine tools, electronics, electrotechnics, fine and optical mechanics, installations and equipment for automation and so forth which, by their specific nature, mean a higher degree of complexity and work and, thus, higher level of professional instruction; b) Strengthening of the position of the working class, the leading class of society, is demonstrated both for the national economy as a whole as well as within each county, a fact which reflects a basic aspect of the changes in the social

structure territorially and, implicitly, achievement of a social-political desirable. Thus, in 1979 the percentage of workers in total worker personnel in some counties was as follows: 82 percent in Alba, 81.1 percent in Baneu, 87.3 percent in Caras-Severin, 81.6 percent in Galati, 82.1 percent in Gorj, 81.9 percent in Harghita, 82.1 percent in Hunedoara, 83.7 percent in Iasi, 80.4 percent in Maramures, 81.1 percent in Mures, 80.1 percent in Olt, 82.3 percent in Prahova, 82.6 percent in Sibiu, 81.1 percent in Suceava, 81.4 percent in Teleorman, 77.8 percent in Vaslui, 73.0 percent in Bucharest Municipality and so forth. 2) In the area of agriculture the introduction of the achievements of advanced science and technology has to an increasingly greater extent involved the need for utilizing qualified labor and, thus, adequate vocational training for all the workers; there is a full demonstration of the trend to qualify the peasantry, based on scientific knowledge, instead of previous training, anchored on tradition, experience and skills.

Raising the level of vocational training and socialist awareness insures the more efficient participation of the workers in the collective leadership of economic activity in industry, agriculture, construction, transportation, trade and so forth. The social changes which have taken place, thus, also are being carried out in a superior potential of collective thought--technical, scientific and organizational--which the workers have available and which can be utilized in the interest of general progress.

The emphasis on the role of the intensive factors of development in the current stage requires strengthening the spirit of responsibility in all places of work for fulfilling tasks, order and discipline, the effort to have the most economical possible utilization of resources and promote what is new to increase efficiency.

Social Homogenization

In the new field, that of socialism, the opportunity has appeared to carry out a process of social homogenization which basically means gradually bringing together the working and living conditions of the classes and social categories, the population working in various branches of activity territorially, as well--in the country's counties and localities.

Implementation of such a process has required the involvement of a complex of factors, among which we mention the following: development of industrial, agricultural production and construction, of transportation, trade, education and other branches in all counties; gradually bringing together the schooling and general spiritual development of the workers; bringing together the incomes obtained (under conditions of equitable differentiation) and of per capita consumption of various goods as well as in the living and household conditions, in the supply with goods, access to public services and so forth.

Our Socialist party and state permanently promote the policy to increase the incomes of all workers under conditions of bringing the small incomes closer to the big ones, which is an important factor in the process of social homogenization. In the 1976-1980 five-year period the average nominal salary rose more than 40 percent, the worker personnel's real salary increased 29 percent, while the peasantry's real income per active person rose 29 percent. The ratio between minimum and maximum salary for the economy is 1/3.5. In conformity with the forecasts, in the 1981-1985 five-year period the real salary will increase 16-18 percent, while the peasantry's real income per active person will rise 20-21 percent. The increase in the workers' incomes will gradually bringing it closer in this regard also results from the particularly

big reduction in the percentage of worker personnel with net salary of up to 1,500 lei and, at the same time, the increase in the percentage of those with net salaries of more than 1,500 lei.

In the years of socialism, basic changes have taken place in the population's consumption, considerably increasing its volume per capita, together with changes in the structure, in the direction of the diversification of the goods and services consumed and growth in the percentage of products with high nutritional substances in food consumption. The increase in the population's monetary incomes at the same time also is reflected in the increase in their possibilities for buying long-usage products which make a growing contribution to satisfying the people's living needs, which are rising without interruption.

Along with the incomes of payment for work, the population also is enjoying large incomes from social consumption capita in monetary form (pensions, state allocations for children, scholarships, aid and so forth) and in the form of goods and services they receive through the system of education and culture, health protection, rest homes, institutions for children and so forth. Incomes from the capital allocated from the state budget for social-cultural actions per capita rose from 211 in 1950 to 1,100 lei in 1965 and to 2,397 lei in 1975 and to 3,195 lei in 1980.

For the long range, the process of social homogenization will intensify together with the powerful development of production forces and improvement in production relations, with the mechanization, automation and cybernetization of production processes, with the general rise in the workers' level of knowledge and qualification, with the economic rise of all the counties and areas. We will see the gradual disappearance of the basic differences between physical and intellectual work as well as the drawing together and elimination of the basic differences between agricultural and industrial work. We also will see the gradual disappearance of the differences still existing in the living conditions of the workers from the cities and the villages and their gradually being brought closer together, as a result of the urbanization process of the village life. In the process of building the multilaterally developed socialist society, bringing the workers and peasants closer together and all social categories, the acceleration of the process of forming the unified society of all workers, thus, will bring the strengthening of the unity and cohesion of all the people and the rising homogenization of our society.

The remarkable achievements gained by Romania in the years of socialist construction as well as the directions for future development, the unprecedented prestige which Romania is enjoying today in the world are graphic proof of the correctness of the policy of the party and of its high responsibility for the future of our people. Aware that what is being carried out is subordinate to raising their material and spiritual well being, all workers are taking action in a full community of interests for implementing the party program and for the general progress of the country and for raising it to the highest heights of civilization.

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CIN: 2700/259

AREAS FOR GREATER PEOPLE'S COUNCIL ACTIVITY SUGGESTED

Bucharest REVISTA ECONOMICA in Romanian No 22, 29 May 81 pp 13-14

[Article by Dr Virgil Dinca: "Improving the Economic Activities of the People's Councils"]

[Text] An important role in applying the new economic-financial mechanism is to be played by the people's councils, which are responsible for all the activities of the territorial-administrative units in their regions. In order to fulfill this role, however, it is necessary, as the secretary general of the party has stressed, to eliminate the tendencies of excessive centralism, as expressed by some ministries and central organs. Similarly, the people's councils themselves must understand well the essence of the new economic mechanism and its advantages. In this regard, and rightly so, at the Second Congress of the People's Councils in September 1980 comrade Nicolae Ceausescu criticized some people's councils that "did not understand the essential points of the new economic mechanism, that is, basing all of our activities on the principles of self-management and self-administration, of economic efficiency and the careful management of each gram of material and each leu. They did not understand that the application of the new economic mechanism requires the most efficient administration possible so that the enterprises and the entire national economy and all the other sectors of activity can work to increase national income and the general well-being of the country."

It has been clearly shown that there is need for the people's councils to also direct their activities according to the same economic principles and criteria as the overall economic system to which they belong and with which they must work in harmony to carry out the supreme goal of the party's policy - the continuing growth of the material and spiritual standard of living of the workers.

Within the framework of the economic activities of the people's councils, community administration is an important field which has not had its own unified system of regulation, carrying out its activities on the basis of a large number of partial regulations issued during the period 1938 to 1969. The Draft Law on Community Administration, currently being submitted for public discussion, hopes precisely to fill this void by updating, completing and unifying the existing regulations, in accordance with the requirements imposed by the development of our socialist society during its current stage. The Draft Law contains in distinct sections the activities of community administration and precisely establishes the tasks, attributes and rights of people's councils of every category, as well as

the units of community administration - enterprises, groups of enterprises, mines, sections and other work formations - which organize, carry out and are responsible for the achievement of the actual activities of community administration. Similarly, it points out the obligations and rights of the citizens and socialist units in their positions as the users of the activities of community administration.

Under these conditions, it is of the utmost current nature to improve the economic activities carried out by the people's councils through their own units - for community administration, industrial construction, services, public transportation and so forth - in order to increase their own incomes and, therefore, the necessary resources for self-financing. The application and strengthening of economic-financial self-administration in the people's councils' activities require them to meet their costs for production and distribution from their own incomes, to make profits from which to ensure their own development and that of the general development of society and to create their own resources for worker participation in the profits and for meeting the costs brought on by satisfying certain social-cultural needs of the workers within the framework of increasing the standard of living. Conditions must be created to increase the contribution of each economic unit to the development of society and to have a more direct interest on the part of the workers collectives in fulfilling plan provisions and in economically developing each locality.

Improving the economic activities of the people's councils appears even more necessary since an analysis of the manner in which they carried out their activities in 1980 shows the existence of a number of reserves that could have been put to use, even though, overall, they had good results. The plan was fulfilled in the category of global production at a level of 105.7 percent, in production-services in community and housing administration at 103.4 percent, in services to the populace at 102.3 percent, in deliveries of goods to markets at 134.5 percent and in exports at 134.4 percent. A total of 186,604 apartments were put into use, representing the largest number of housing units achieved to date in one year. There still are, however, some aspects that indicate that certain economic phenomena are still not under control in all sectors and fields of activity: there are losses, inappropriate overpayments of salaries, failures to reach certain plan indicators, failures to repay credits on time and so forth.

Thus, at local construction organizations the level of production in construction and assembly was not fulfilled at the planned levels. This failure, together with shortcomings in the organization of production and labor that were principally expressed by the inappropriate use of equipment and manpower and by the failure to always adhere to labor norms, as well as by the accentuated dispersal of projects throughout the areas of the counties, led to an overrun of 54.2 lei in the level of costs planned per 1,000 lei of production. Another negative influence on the balancing of incomes and expenditures was the non-fulfillment of the plan for contracting privately-owned apartments. There is, however, an inconsistency between the demand and the offering with regards, first of all, to their location and the number of rooms.

The community and housing administration units in the production and service enterprises achieved a volume of production and services 6.1 percent above plan provisions. Good results were also obtained in the maintenance of housing units, with the plan for maintenance, repair and building services projects being fulfilled at the level of 112.3 percent. With such results, it was normal for financial activities to also be favorable, achieving a level of profits 10.8 percent greater than the amount planned. Nonetheless, four enterprises recorded losses against the planned levels. Likewise, unjustified losses were recorded in some activities because of a lack of control and guidance and a failure to keep production costs at a low level.

Another problem that has a negative influence on the economic-financial status of certain people's councils is the fact that economic projects, housing units and social-cultural and municipal facilities built in the county seat still have a too large percentage in the total number of new projects, to the detriment of the small and medium-sized localities. Because of the failure to build certain economic projects planned for some small cities, as well as in the new urban centers, a portion of the new housing units built are still not occupied, and these units are not bringing in the rent monies counted upon in the balance of incomes and expenditures. On the other hand, a significant number of housing units and social-cultural and municipal facilities were not put into use as a result of the failure to prepare investments, the dispersal of manpower and production means, the failure to use equipment at its full capacity and the lack of discipline occurring at some work sites. A series of work sites were not regularly supplied with cement, reinforced concrete, welded bars, insulating and waterproofing materials, mineral aggregates and so forth.

In agriculture, the people's councils did not fully exercise their attributes with regards to the unified management of this field in their administrative-territorial units, the achievement of the plan regarding fodder supplies and an increase in the number of animals, and the supply of products for the people to the state fund.

As a result of the measures adopted, the results of the first quarter show that in 1981 such phenomena are tending to decrease in frequency and intensity, with the advantages of applying the economic-financial mechanism in all fields and sectors of activity becoming more apparent. The amount of production and services in community administration was fulfilled at the level of 107.6 percent, construction services at 109.8 percent, services to the populace at 100.7 percent, industrial goods production and non-industrial services at 111.4 percent, and delivery of goods to the markets at 115.3 percent. Correspondingly, the financial indicators show improvements.

The experience to date shows that it is worthwhile to carry out in each county detailed analyses substantiated on the basis of a variety of calculations in order to establish proposals for the placement of new economic investment projects,

social-cultural projects, housing units and municipal facilities during the 1981 to 1985 period, within the framework of the zoning plans for the localities. This will be done while pursuing a maximum efficiency in the construction and use of each project, both at the local level and within the framework of the national economic system.

In the field of housing unit construction, an acceleration of the rate of completing and finishing these apartments in an advanced stage of work and the permanent operation of an acceptance commission would reduce the time required to turn-over new apartments. This requires, however, that new housing construction projects be started in an organized manner in accordance with the delivery schedules for the building materials, taking the appropriate measures to use the manpower and equipment so as to achieve the planned labor productivity. It is necessary to organize the supplying of the work sites and to carry this out so that we no longer repeat the situations of previous years when, because of certain deliveries out of step with the building process, certain prefabricated items were tied up and left to deteriorate, and there was an inappropriate overrun in the salary fund and, in general, in the level of planned expenditures. Similarly, it seems necessary to have a better distribution of housing units throughout the counties, keeping in mind to a greater degree than up to now the needs of the municipalities and cities that are not county seats and of those localities that will become urban centers, and of the housing projects near to industrial complexes and zones.

The impact of the energy crisis that is occurring throughout the world is also being felt in the designing of housing construction, so that we must reach a point of minimizing the consumption of construction materials which, as we know, are energy intensive. This minimizing, however, should not lead to an increase in the consumption of energy in the operation of these buildings. In this regard, more precise calculations should be made in order to show the economic efficiency of certain improved thermal insulators, even those involving some additional costs, from the point of view of the savings of fuels over a period of 30 to 40 years. Similarly, there will be an increase in the number of buildings having fewer levels of floors, for the purpose of reducing the additional costs involved in building foundations, elevators, water pumps and so forth for tall buildings, and of reducing the use of electricity, thermal energy and fuels in the operation of building these types of structures. To the same end, beginning this year, we will expand the use in housing of a framed-out roof, rather than a flat roof, which will mean a lower level of energy consumption and less metal and cement, as well as over 50 percent lower maintenance costs.

The housing builders are also faced with the problem of working in rural settings and small and medium-sized cities to construct certain two-floor houses equipped with solid fuel stoves. In the context of the deepening of the energy crisis, this presents an advantage in that, in addition to wood and coal, they can also use a series of local resources - tree branches and stumps taken from the forests, stalks from sunflowers, tobacco plants, corn and plants, vines and

so forth. At the same time, they have multiple functions: they have an oven for baking and a range for cooking and they can be equipped, on their upper portion, with a tank that can be used to supply hot water to the household.

The community and housing administration units and the service and production enterprises, in addition to the economic nature of their activities, have an ever greater role in improving the citizens' level of comfort. Along with the growth in the degree of urbanization, there is an increase in technical-municipal and social-cultural facilities, while, at the same time, in order to obtain good economic results, the existing facilities must be appropriately used. If we analyze, for example, the economic-financial and social efficiency of the funds allocated to the water and sewer systems in the localities, we find that important steps have been taken, but that there are still places, like Braila, Resita, Craiova, Galati Rimnicul Vilcea, Tulcea and so forth, that do not have purification stations and that some counties (Gorj, Arad, Dimbovita and so forth) use drinking water in an irrational manner, using it in large amounts for industrial purposes and construction work, and that there are large losses in the water distribution facilities which, in some counties (Satu Mare, Vaslui), reach 10 to 20 percent. We should also note the fact that in a series of municipalities and cities there is a shortage in collection and treatment facilities, as well as defects in their use.

There are large tasks for the enterprises along the lines of developing services for the populace, services that are currently deficient, especially with regards to construction. In order to stimulate an increase in the volume of services in this area and to better satisfy the requests of the citizens, we feel that this type of service should be provided, in an installment scheme, under similar conditions in both state units and cooperative units. Currently, the regulations, which are different for these units, place the state units at a disadvantage.

Although some progress has been made, nonetheless we are working too slowly in spreading the recycling of used water to all purification stations, including those built prior to the turn to using non-conventional energy sources, so that recovery units can capture the natural gas stemming from the fermentation of certain muds. At the same time, it is necessary to expand the recovery of raw materials from household waste (metals, glass, fabrics and so forth) and to produce thermal energy by burning residues that cannot be otherwise used. A facility that has a daily incineration capacity of 200 tons of waste, in addition to contributing to appropriately solving the city's sanitation problems, provides an annual savings of 1,350,000 lei by using secondary products (1,800 tons of scrap iron and 7,000 cubic meters per year of efficient building block for construction), reduces transportation distances and eliminates operations to compact, level and cover household wastes. In addition to this, it supplies to the urban system 35,000 G/cal per year in thermal energy, an amount equal to an effective savings of 2,790 tons per year of conventional fuel. Until such an

incineration facility can be built in each locality, the recovery of recyclable raw materials from the wastes and garbage of enterprises and the populace must take place since it has been found that they contain large amounts of metals, paper and so forth. For example, the Bucharest Sanitation Enterprise collected from garbage dumps in 1980 2,763 tons of iron, 118 tons of steel, 24 tons of copper, 11 tons of bronze, 30 tons of brass, 30 tons of zinc, 17 tons of lead, 42 tons of aluminum, 41 tons of paper and 1,600 used auto tires.

Certainly, there must be special concern for the more accentuated development of small industry, artisan production and services for the populace, since these are economic sectors that have a significant potential capable of contributing more substantially to increasing the standard of living and the incomes of the people's councils.

In any case, the above suggestions do not exhaust the broad problem of the groups of actions that must be undertaken by the people's councils to improve their economic-financial situation and to rigorously apply the new economic-financial mechanism based on self-management and self-administration. They merely constitute several directions of actions tied to a greater degree to the people's councils' own and specific activities, in which good results can be obtained with relatively small investments.

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MORE EFFICIENT USE OF PRODUCTION ASSETS STRESSED

Bucharest REVISTA ECONOMICA in Romanian No 21, 5 Jun 81 pp 9-10

[Article by Dr Vasile M. Popescu: "A Powerful Technical-Material Base Used at High Parameters"]

[Text] On 11 June, we will mark 33 years since the revolutionary act of nationalizing the principal means of production, an event of major importance in the process of establishing certain new production and social relations in our country. Comrade Nicolae Ceausescu emphasized: "The achievement of this qualitative leap in our social life necessitated the transfer of national wealth into the hands of the workers as a sine qua non condition. In this regard, a decisive role was played by the revolutionary act of nationalizing the principal means of production and, later on, cooperativizing agriculture, which led to the creation of a powerful socialist sector in the economy."

Through the events of 11 June 1948, we nationalized all the enterprises in the 12 important industrial fields in order to remake and develop the economy. At the same time, all underground wealth was nationalized. At the time of the adoption of the Constitution in April 1948, this wealth had not been nationalized and was now added to the list of state property, as well as the main industrial enterprises or banking, mining, insurance and transportation and telecommunications companies. As a result of the law, 8,894 enterprises were nationalized, including 3,560 that were of local interest. The socialist sector created in the economy as a result of nationalizing served as the foundation upon which, over time, a powerful technical-material base was built for our society.

During the period 1951 to 1980, we invested 2,173.9 billion lei in the national economy, of which in just the 1976-1980 five year plan alone we achieved investment projects worth 932.3 billion lei, an amount that is nearly equal to the total amount of investments in the three preceding five year plans. During the 1981-1985 five year plan, we will allocate an amount of investments reaching 1,300 billion to 1,350 billion lei, more than the entire amount for the years 1951 to 1975. The efforts made in this direction are expressed in the powerful growth of fixed assets, primarily production assets. In 1980, the value of fixed assets represented 1,870 billion lei, compared to 1,203.3 billion lei in 1975 and 757.1 billion lei in 1970. At the end of the current five year plan, the total amount of fixed assets in the national economy will reach 3,000 billion lei.

As is known, the simple existence of a powerful technical-material base is not enough to obtain economic growth in accordance with the efforts made. This does not happen by itself. Economic progress occurs as quickly as the fixed assets are used efficiently, providing as large an increase as possible in social labor productivity.

For our country, such a requirement is even more demanding, keeping in mind the immediate and future purposes of our party's economic policy: going beyond in the shortest possible time the stage of a developing nation, moving Romania by 1985 to the stage of an average economically developed nation and, later, its approach to the status of the developed industrial countries of the world. These are objectives that, in both a quantitative and qualitative sense, require high rates of growth and, implicitly, the efficient use of fixed assets. In light of these requirements, in the directives of the 12th Party Congress it is stressed that the intensive use of production facilities and the growth of the efficiency of fixed assets "represent one of the basic problems of the future five year plan... and a decisive condition for the development of the national economy at a high rate."

Under current conditions, along with the application of the new economic-financial mechanism each collective must plan ahead with a maximum of exigency and maturity in using public funds, and it must ensure the day-to-day full and intensive use of machinery and equipment, since only in this way can conditions be created to quickly recover the funds advanced by society.

The use of all technical means and existing areas at maximum capacity and high levels of efficiency creates advantages of the greatest significance for Romania's accelerated economic growth. Compared to the method of expanding the production potential through additional investments, the intensive use of existing facilities permits, first of all, obtaining an increase in production with the same fixed assets or sometimes with small investments, thus saving important amounts of investment funds and hard currency. Second, the state has the opportunity to direct these saved funds towards other sectors in order to develop the national economy and raise the people's standard of living. Third, time is gained since an increase in production obtained by putting new production facilities into operation requires not only investment funds and hard currency, but also a relatively long period of time to build these projects. Fourth, an increase in production is obtained without needing, generally, additional manpower, but rather on the basis of increasing work qualifications and experience, as well as its judicious use. Last, production costs are reduced per unit of product on the basis of decreasing the percentage of manpower costs, as well as constant costs (including amortization costs), since these are distributed over a larger volume of production.

The Action of Certain Multiple Factors

In our reference to the efficiency of using fixed assets, the data seems graphic to us in table No 1, which presents the evolution of several synthetic indicators and the correlations that can be established between them. For the entire 1950 to 1979 period, in the industrial and transportation and telecommunications branches, as well as in the overall economy, there is a trend of growth in the social (total) product and national income (net production) per unit of fixed production assets, as well as a more rapid growth of labor productivity, compared to that for supplying labor with fixed production assets. Such a trend is brought about by a number of factors.

Table 1

The Dynamics of Certain Indicators That Characterize the Efficiency of Using Fixed Assets (in percent)

	Peri- oada	Total economic națională	Industria	Con- strucții	Agricul- tură	Transpor- turi și te- lecomu- nicații
Productivitatea muncii (1)	1	1138.2	949.7	397.6	543.1	635.9
	2	319.9	249.1	223.8	283.2	196.3
Înzestrarea muncii cu fonduri fixe (fonduri fixe populația ocu- pata) (2)	1	619.3	302.8	1013.9	894.1	201.5
	2	120.6	267.3	422.9	495.7	210.3
Eficiența globală a fon- durilor fixe (produsul social/fonduri fixe) (3)	1	181.7	138.9	41.2	87.1	216.0
	2	99.4	80.0	30.6	69.7	87.9
Eficiența netă a fondu- rilor fixe (venitul na- țional/fonduri fixe) (4)	1	181.7	100.9	39.2	60.7	315.6
	2	99.7	93.2	32.9	37.1	93.2
Cresterea productivității muncii, comparativ cu creșterea fondurilor fixe (5)	1	140.4	52.8	7.8	119.1	105.6
	2	93.5	48.5	34.4	90.7	37.7
Cresterea eficienței nete a fondurilor fixe com- parativ cu creșterea înzestrării muncii cu fonduri fixe (6)	1	29.7	37.6	3.9	6.8	156.8
	2	31.1	34.9	12.5	11.5	44.3

1 = 1979/1950 ; 2 = 1979/1968

Key:

1. Labor Productivity
2. Supplying Labor with Fixed Assets (fixed assets/employed portion of population)
3. Overall Efficiency of Fixed Assets (social product/fixed assets)
4. Net Efficiency of Fixed Assets (national income/fixed assets)
5. Growth of Labor Productivity Compared to Growth of Fixed Assets
6. Growth of Net Efficiency of Fixed Assets Compared to Growth of Supplying Labor with Fixed Assets

One of these factors is technical progress. We will refer primarily to industry, a branch which, as is known, has the largest percentage of fixed production assets and plays a decisive role in increasing the social product and national income. In the entire 1950 to 1979 period, the total product of this branch increased 25 times over and net production 34 times, while the amount of fixed assets increased 18 times over. At the same time, labor productivity per person employed increased at a much greater rate (9,497 times over) than the supply of fixed production assets to labor (5,028 times over). This means, therefore, that in 1979, compared to 1950, in the entire industrial branch the overall efficiency of the fixed production assets calculated in relation to the total product increased by 38.9 percent, while the net efficiency of these funds increased by 88.9 percent. In other words, for each leu invested in fixed production assets and for each percent of growth in the supply of fixed production assets to labor, we obtained a net production and a labor productivity approximately twice as great.

A series of structural factors, such as the changes that have occurred in the structure of fixed assets, have an influence upon the trend for growth in production per unit of fixed production assets. In this regard, an essential role is played by concentrating material and financial means towards the construction of significant projects of a production nature in the decisive branches for the progress of the entire economy. As a result of this fact, there has also been an increase in the percentage of active fixed assets in the structure of fixed assets, which has positively influenced the efficiency of fixed production assets in the sense of increasing specific production per unit of fixed asset and decreasing the required amount of fixed production assets. Thus, compared to 1950, in 1979 the specific fixed production assets needed to obtain a unit of total product (or the total coefficient of the fixed production assets) decreased by 28 percent, while the specific fixed production assets needed to obtain a unit of net production (the net coefficient of fixed production assets) decreased by 47.1 percent. Correspondingly, these positive results also are reflected in the reduction of the percentage of amortization costs for fixed assets in the structure of the effective cost of goods production in national-level industry - from 7.5 percent in 1951 to 4.5 percent in 1979.

In addition to technical progress and the structural factors, we can also mention a series of organizational factors, such as: concentrating, specializing and cooperating in industrial production, improving the organization of production and work, and so forth, which increase labor productivity and specific production per unit of fixed assets. If we examine the evolution of the efficiency of fixed assets in the transportation and telecommunications branch, as well as the entire economy, we arrive at similar results and conclusions.

Despite these achievements, if the analysis of the evolution of the synthetic indicators mentioned above refers to shorter periods, we can observe certain changes in the mentioned favorable correlations. The factors that determine these changes have a dual nature: objective and subjective. Among the factors of an

objective nature which, as the experiences in numerous countries show, inevitably make their mark on the efficiency of fixed assets, we can mention: the need to have an accelerated replacement of fixed assets (whose value tends to increase in many cases); the deterioration of conditions for using natural resources; and, the need to allocate certain increased funds to develop and modernize the means of communications and transportation, to develop urban areas and so forth - processes that especially occurred after 1960.

For our country, in addition to the mentioned factors, the efficiency of fixed assets is also influenced by certain social-economic tasks that we propose. The accentuated modernization and diversification of the branches, sub-branches and products, requirements of building a modern economy, are not possible without the construction of new production facilities and projects. This requires the allocation of increased investments not only in machinery and equipment - active fixed assets, but also inevitably in construction, although at a much smaller percentage. At the same time, in industry there is an increase in necessary investments in the extractive branches and sub-branches (especially for the production of lignite and low-content non-ferrous mineral ores), in the energy sector for thermal power stations and in the inferior fuels sector and for hydro-power stations that require increased specific costs per unit of fixed assets. There are also cases when some fixed production assets do not produce economic effects except after a relatively longer period of time.

Similarly, in agriculture irrigation projects to improve the land and prevent flooding involve significant investment funds which yield results over longer periods of time. Similar situations also exist in transportation and telecommunications, such as: putting in dual tracks and electrifying certain rail lines, modernizing roads and other means of urban transportation, building or developing maritime and river ports, and so forth. It is fitting to also add that the development or zoning of certain localities, which in the past have not had their own industries, has required and will continue to require the construction of communications lines, electrical power network and new industrial complexes, including buildings which do not directly contribute to increasing production, but which resolve complex and future tasks.

The Largest Possible Production From Each Unit of Fixed Assets

All these objective conditions do not, however, justify certain shortcomings stemming from causes of a subjective nature. As was also emphasized at the 14-15 October 1980 Plenary Session of the Romanian Communist Party's Central Committee, the following had a negative influence on the efficiency of fixed assets: exceeding the timeframes planned for putting certain production facilities into operation; failing to reach the projected production parameters within the timeframes outlined in approved schedules; low use-indices for machinery, equipment and installations; failing to ensure a regular rate of supply of raw materials, materials, tools and so forth; deficiencies in the training and

use of the workforce; poor maintenance and repair work and, especially, the inappropriate use of fixed assets in investments, and so forth. Beyond these causes and at the basis of certain inappropriate usages (for machinery and equipment) is the insufficient concern of the management of certain enterprises, centrals and ministries for the practical creation of all the conditions necessary for the proper carrying out of production.

Under the conditions of directly applying the principles of the new economic-financial mechanism, whether self-management and self-administration and when there is need for a change in the nature of development towards growth based to a greater degree on intensive factors, it is necessary for each unit, regardless of type, to undertake firm actions and measures to increase the efficiency of fixed assets. At the size of the national economy in 1985, for example, an increase of only one percent in the efficiency of fixed production assets would provide an increase in the national income of approximately 8 billion lei, income that would otherwise require approximately three percent of the investments. In this light, we better understand why at the 12th Party Congress comrade Nicolae Ceaușescu stressed the importance and necessity of obtaining in industry in 1981 "a total production of at least 1,000 lei and a net production of over 500 lei per each 1,000 lei of fixed assets and unamortized value."

Overall, the efficiency of fixed assets that will be obtained during the 1981 to 1985 five year plan is synthetically shown by the contributions that are to be made by the principal branches of material production to the creation of social product and national income compared to the portion that goes completely to the fixed production assets (see Table No. 1).

Table 1

The Specific Weight of the Social Product and National Income in the Total (gross) of Fixed Production Assets (total economy = 100)

	Fixed Production Assets		Social Product		National Income	
	1980	1985	1980	1985	1980	1985
Industry	62.9	62.1	66.2	69.9	60.7	65.8
Agriculture	12.1	11.5	12.2	10.9	14.2	12.7
Construction	4.9	4.8	18.8	9.0	10.1	5.3
Transportation and Telecommunications	18.0	18.5	4.8	3.3	5.2	4.6

Thus, in 1965 industry will receive approximately 62 percent of the total amount of the fixed production assets and will contribute 65 percent to the creation of national income. By increasing the efficiency of fixed assets in industry, we hope to provide in 1965 over 20 percent of the entire increase outlined for national income. Similarly, agriculture will receive 11.5 percent of the total amount of fixed production assets and will contribute 12.7 percent to the national income. Actually, if we could ensure the full operation of existing facilities, we could achieve the planned production without any other investments.

8/26

(00) 2100/291

ACHIEVEMENTS, PROBLEMS IN ENSURING LABOR SUPPLY VIEWED

Bucharest ROMANIA LIBERA in Romanian No May 31 p. 1

[Interview with Victor Dragulin, deputy director in the Ministry of Labor, by Mircea Scripcu, date and place unknown: "The Quality of Training for the Workforce"]

[Text] The program to provide, train and improve the workforce this year calls for the training of 200,000 qualified workers for production. With regards to the actions taken to implement this program, the results obtained to date and the problems that must still be resolved along this line, I asked comrade Victor Dragulin, a deputy director in the Ministry of Labor, for a series of details on this subject.

[Answer] In order to provide a workforce in accordance with this year's requirements in production, complex actions were undertaken, in cooperation with the appropriate authorities. Compared to the necessary number of qualified workers established in the program, in the first quarter of this year approximately 19.1 percent of the number of qualified workers were provided, of whom over 15.3 percent were graduates of professional schools and training courses, and were assigned to production jobs, while the remaining workers are still in training and will graduate by the end of the year.

In order to assist the socialist units in achieving the programs to provide and train the workforce, the Ministry of Labor and the county directorates for labor and social welfare problems organized during the first quarter of this year actions to carry out analyses and support in 76 industrial and construction-assembly enterprises, as well as in training units. Large industrial units were involved in these actions, such as the Jiu Valley and Oltenia mining combines, the Galati, Herculia and Caldasesti steel combines, the "Vulcan," "Semenovskan" and "Timperi noi" enterprises in Bucharest, "Starmecanica" in Braeov, the Caldasesti Steel Construction-Assembly Enterprise, the Ploiesti Industrial Construction Trust and so forth.

Thus, in the first quarter of 1981 for the Jiu Valley Mining Combine over 2,050 workers were recruited, for the Oltenia Mining Combine approximately 1,500 workers, for construction-assembly units 9,000 workers and so forth. Similarly, 12 investment projects, located at large industrial complexes, were analyzed and assisted in obtaining their workforce. I can note that the recruitment of the workforce was carried out in a differentiated manner.

[Question] How was this done?

[Answer] Generally, the necessary workforce in each county is obtained locally, with demands upon resources in other counties being made only in well-justified cases, on the basis of a recruitment plan approved by the Ministry of Labor. As a result, however, of the measures taken to transfer approximately 100,000 persons this year from the non-production sector to production activities, the industrial units in a series of counties, such as Alba, Arad, Brasov, Caras-Severin, Cluj, Covasna, Timis and so forth, were no longer forced to recruit workers from other counties. In the same manner, actions were taken in Bucharest. The fuller use of the labor resources already existing in the units, principally those workers indirectly involved in production, constitutes an important task during the current stage. This has required units to organize during the first quarter of this year certain training or, as the case may be, retraining courses or multi-skill courses for numerous persons from the ranks of those who were indirectly involved in production or were auxiliary personnel and were transferred into production activities that were, naturally, more useful for the national economy.

[Question] Within the context of using the labor force, we would like you to point out to us how personnel training is provided by type of skill.

[Answer] In order to meet the requirements of production and the national economy, the program calls for training qualified workers in 51 basic trade skills, which represents approximately 84 percent of the total number necessary as outlined for 1981. Compared to 1980, this year an increased number of workers are to be recruited and trained for these skills: lathe operator, casting-foundry worker, steel worker, drill operator and so forth. According to the results obtained to date by the personnel training units, there are still shortcomings in meeting the necessary number of workers for some trade skills. Thus, in the mining profession compared to the necessary number of qualified workers outlined for the first quarter of this year, only 65.5 percent of the number were trained, while in those skills specific to the hot sectors in the machine building industry (foundry workers, large-treatment specialists and steel workers) only 50 percent of the necessary number of workers were provided. Similarly, in those skills specific to the agricultural sector (agronomist-equipment operator, tractorist specialist, agricultural mechanic) during the first quarter of this year a very small number of personnel were trained. This gap can also be explained because of sporadic activities along the lines of educational and professional motives regarding filling those job positions listed in the training plan at specialized high schools and professional schools: mining, petroleum, metallurgy, construction, agriculture and agricultural-mechanics.

On the other hand, there are enterprises that are operating with more workers than the plan calls for, but which complain that they have an insufficient number of workers in the basic skills and do not take organizational measures to train their workers either in schools so they can have number of workers required by

production. Thus, the Bratsky "Tractor" Enterprise had an average of 101.9 percent of the planned number of workers during the first quarter of this year and, at the same time, had a shortage of qualified workers in the basic skills - (forging-casting specialists and forging-treatment specialists. During the same period, at the Moreni Drilling Rig they did not have the necessary number of workers needed for drilling, the Kostts Metallurgical Construction and Assembly Enterprise did not have the required number of carpenters, bricklayers, iron workers and so forth.

In another area, we can mention the shortcomings that are occurring in substantiating the specialized training plan according to each skill at the professional high schools and schools, which leads to the training of an excess number of graduates in some industrial skills (mechanics, electrotechnicians) and some non-industrial skills (economists, teachers, mathematicians-physicists), while in other areas, year after year, certain job positions contained in the plan are not filled, such as: in mining and petroleum work, geology, metallurgy, construction and agriculture. This fact has a negative influence, on one hand, in providing a qualified workforce in the basic priority sectors of the economy and, on the other hand, creates difficulties in providing jobs for a portion of those graduating from school who were trained in excess skills compared to the number needed in those skills mentioned.

Another reason for failing to provide jobs for all the graduates of high schools and professional schools is the delays in putting certain new production facilities into operation. For example, during the first quarter of this year, of 22 investment projects analyzed by the directorates for labor and social welfare problems that were to go into operation, 10 important projects were rescheduled to start-up during the second quarter of 1981, including: the Iasi Heavy Equipment Combine (the steel mill and foundry), the Iamartsi Oil Factory, the Iasi Plastics Processing Enterprise, the Vaslui Heavy Equipment Combine and so forth.

(Question) Regarding the shortcomings just mentioned, what do you feel is needed to be done by the authorities?

(Answer) In order to avoid these kinds of shortcomings, it is necessary, first of all, for the production units and their superior organizations to pay more attention to substantiating the number of qualified workers they need by type of skill and training, in accordance with the planned number of workers, as well as with the need to train those workers indirectly involved in production so they can work directly in production. It will be necessary to express much greater concern for placing a greater number of women into jobs and training, since it is a fact that they represent approximately one-half of the total labor resource. The unionization, other central organs and the county people's councils must help their units to a greater degree in finalizing their own programs regarding providing and training the necessary number of workers, especially for the basic skills, as well as in correlating the organization of training and the start-up of new production facilities.

Similarly, a more sustained concern will have to be shown for improving the quality of professional training, especially in the practical skills, by providing a material base and specialized personnel who can guide the young students in their on-the-job training in the enterprises.

Since we are nearing the close of the school year, the Ministry of Labor, in collaboration with the Ministry of Education and Training, the economic ministries and their specialized local organizations, is currently working to resolve the problems regarding supplying the necessary number of workers in the shortage skills in the economy and employing all the graduates in production. By continuing our actions through such methods, I feel that there are conditions in which to provide workers to all sectors of activity, as well as to more efficiently use the existing labor resources.

8726

(54) 2700/488

INCREASED MECHANIZATION, AUTOMATION OF PRODUCTION SOUGHT

Bucharest REVISTA ECONOMICA in Romanian No 77, 29 May 81 pp 3-6

(Article by Darbu IB, Putrescu) "The Mechanization and Automation of Production Processes"

[Text] The programs, actions and measures initiated in order to fulfill the principal objectives of the 1981 plan and the entire current five year plan pursue the accentuation of the process for the intensive development of the economy. In this regard, the broad promotion of technical progress is capable of ensuring the better use of all material and human resources under conditions of increased efficiency and the continued growth of labor productivity. Furthermore, for this year the sole national economic-social development plan of the country calls for an increase in labor productivity in industry of seven percent compared to 1980. The principal factors and directions for action for attaining this level are the more rapid extension of the mechanization and automation of production and the introduction of new work technologies based on machinery and equipment having superior operating parameters resulting from the extension of automated production processes.

The central task outlined by the party regarding the intensification and extension of mechanization and automation in industry is primarily based in: a) the mechanization and automation of production processing by specific operation or groups of operations; b) the automation of production processes in large groups of installations. In the first category, we have the processing industry and the producers of items and products (the machine building industry and light industry), while in the second category we have the continuous production processes in the raw materials processing industries (the chemical industry, the petrochemical industry, the metallurgical industry, the energy industry, the construction materials industry, and in transportation and telecommunications). In achieving the economy's development program, the industry that produces the automation equipment is fully involved, both through the contribution it makes within the framework of the machine building branch and through its direct contribution in all the sectors of the national economy. Through automation, we can achieve, concomitantly with an increase in production, an increase in quality and a higher level of economic efficiency, especially by increasing productivity.

Using Automated Control Machinery

The development of the production of technological equipment having a high level of automation and the production of machinery-powered equipment of complex processing lines with automated functions gradually reduce the level of use of universal machine-tools employing manual operations. It is worth noting the fact that 10 years ago automated machine-tool operations led to the use of this equipment in large or very large series production, currently because of the automated control equipment on machine-tools and powered equipment used in processing, based on computerized digital control (CNC) that is capable of being programmed and having program changes made quickly, machine-tools and powered equipment used in processing that employ automated control are also being considered for small or unique series production runs.

CNC system automated control equipment used on machine-tools and powered equipment involved in processing work on up to 10 distinct axes and have a large capacity program memory which permits the successful processing of parts that have very complex shapes. Processing equipment and processing centers (for turning, milling, boring and cutting) have tool storage capacity (up to 60 distinct tools) and are served both by so-called digital control and by the automated programmable electronic equipment that carries out the static switching, in other words without any movement of parts, of the operating program of the machine and the automatic changing of the tools. There are areas of production activity where, at the current level of development in industry, automation operations cannot be conceived of being carried out except by specialized, digitally controlled machine-tools. The current development of electronics and the accelerated introduction of microelectronics have implicitly led to the miniaturization of products and to the growth in the density of electronic components on printed circuit boards having two or more levels. In the production of these items at higher and higher volumes and with especially precise requirements, a special role is played by the rational use of specialized equipment and machine-tools operating in an automated mode. Thus, in the production of printed circuit boards the hole punching operation to put in the electronic components (and there are up to 1,000 1.1 mm holes on a standard model board) cannot be conceived except as being carried out by drilling equipment having digitally controlled heads (positioning control). The labor productivity in the processing now in this manner is at least 2.2 times higher, while from a quality point of view, because of the automated measuring methods and supervision of the operations (parts control and automated review-correction of tool use), rejects are practically eliminated.

In this field, our industry has produced complex automation equipment for machine-tools and processing centers, equipment that automatically controls the main motions and advance of the machinery and that is equipped with direct current motors working through converters and speed adjusting devices, with these being automatically controlled by digital program control equipment (Numerum) or automated programmable equipment. In the field of CNC system digital control

equipment), a complete family of equipment is to be produced whose application, due to the high capacity of the equipment (up to 10 axes), will permit the carrying out of the most complex forms of automated processing.

Keeping in mind the ever more intensive supply of automated control machine-tools to the economy, special attention must be given to the manner of use of this equipment. Currently, users have approximately 1,000 of these machine-tools, of which approximately 30 percent are not being used in the digital control mode that is available. The full use of all the digital control machine-tools in particular requires the users to ensure that they have the qualified personnel to use this equipment, an appropriate maintenance program and adequate working conditions.

The evolution of the design and production of digital control equipment is based, first of all, upon the use of multiple function electronic components, such as semi-conductor memories and microprocessors. Currently, a CDC type digital control system is being produced whose total size will allow it to be incorporated within the machine-tool equipment itself. Similarly, in our country we are using robots in the processing industry which are taking over more and more complex functions: lifting-transport-placement and certain difficult operations (welding and riveting), as well as complex work cycles where the production is especially designed for certain applications. Thus, at casting facilities complex casting lines are being made that are exclusively served by robots that carry out the casting operations.

The introduction and use of industrial robots permit the extension of certain processes that cannot be carried out by man, as is the case of certain processes in the nuclear reactors that power nuclear electric power stations or of poisonous environments. The principal elements that influence the success of robots in industrial applications are focused upon: electrically-operated and automatically controlled equipment; mechanical movement systems within mobile articulated systems. With regards to the automated control operating equipment, these are of the CDC system automated control equipment types that are programmable on at least four axes simultaneously (freely programmable systems).

The Achievement of Assembly Operations Using Automated Devices and Tools

Of major importance in the machine building assembly shops is increasing the level of mechanization in the assembly and mounting process— as a result of developing the production of specific tools and devices employing electrical and pneumatic actuation, as well as the production of automated and semi-automated lines. Along these lines, the Institute of Scientific Research and Technological Engineering for Machine Building is working with the automation industry to produce assembly lines for series production items. By mechanizing these operations and the movement of parts, they will obtain an increase in labor productivity of over five times, along with higher quality.

Today, because of the evolution in the production of tools and devices, as well as the experience gained in organizing and carrying out assembly in variable series production runs, we can no longer conceive of the existence of an assembly shop without a level of equipment that will allow for the mechanized processing of all difficult operations. Similarly, final quality control of products is done on specialized, automated test stands which verify the basic functional parameters in a minimum amount of time. Thus, in the electrotechny industry by mechanizing assembly and automating certain production and control operations, they succeeded in doubling labor productivity and in some cases tripling it, with a noticeable improvement in product quality. In the calibration of electrical power meters, currently at the Timisoara Enterprise for Electrical Measurement Devices instead of the classical manual timing methods for the consumption of electricity, they are using a direct readout stand that has photoelectric cells and automated processing by a minicomputer of the volume measured, with a direct display of the results. This method permits the calibrating and regulating operations to be carried out simultaneously, with the productivity for these operations increasing by over three times.

In the automation industry and in the industrial and professional electronics industry the level of exigency imposed by operational safety requires the item by item check of the electronic and electrical components. Carrying out these checks on a sufficiently large number of functional parameters for all the components requires a significant amount of work with very large costs for equipment, manpower and energy. Because of this fact, throughout the world the testing of electrical and electronic components is carried out piece by piece with the help of automatic operation testing devices and stands which permit the complete testing program in a very short time. The automation of testing and control operations for each electronic component, electronic block and functional subassembly reduces by at least one-tenth the amount of labor needed and ensures, via the programs introduced to the automated system, the checking of different parameters and finding of eventual defects and their locations. Similarly, the mechanization of wiring operations, as well as the attachment of components, contribute to reducing by from one-third to one-quarter the amount of work needed in classical technological procedures.

In our industries in this field, we have come up with our own design for test stands using minicomputers which, in accordance with the test programs, carry out the complete testing operation. The large scale extension of this is tied to using equipment of a very high professional level based on microprocessors and semi-conductor memories (with a very large amount of integration). These are equipment that are also found in the equipment inventories at enterprises.

Priority Programs for Extending Mechanization and Automation

The fulfillment of the objectives of the 1981 plan under conditions of high efficiency involves special efforts to extend the mechanization and automation of production processes in all the sectors of the economy. On the basis of special

priority programs. For the extraction industry we will produce new types of special construction equipment for specific types of equipment used in mining coal underground and for heavy equipment used in surface mining operations, as well as for extracting oil and gas. Complete equipment types are being made for large capacity excavators whose overall productivity is superior. Similarly, in order to automate drilling for oil and gas we are producing automated tele-mechanical and tele-guidance equipment. For the metallurgical industry, by making here in-country direct current, static switching, high power actuation equipment we have succeeded in providing the necessary number to this important sector of the economy at the steel combines in Hunedoara, Galati, Calarasi and so forth. In the energy industry, likewise, the automation of steam boilers and hot water heaters and turbo-power equipment ensures a maximum level of integration in the country. In the chemical, petro-chemical and construction materials industries, the use of electronic computers is being extended into the management of processes that are being automatically handled with the help of automated equipment and devices produced by the national automation industry.

The extension of modern technological procedures in the automation industry currently ensures the development of advanced automation systems that will permit the automated regulation of highly complex production processes. Using digital equipment production technology, the automation of processes in the chemical industry is to be carried out employing "Distributed Systems." These are characterized by a very high degree of operating blocks (which replace panels and even equipment), but also with an extension of programming activities. Through programming, we can fully follow the production process on graphic-display color screens and, by sampling data, we can check on any operating equipment, element or parameter. Similarly, the use of optical displays transmitted by optical fibers allows the extension of certain types of automation to processes in difficult working environments, and extends the automation of data transmission so necessary in processing data and in automation.

In telecommunications, digital technology is currently involved in the movement to electronic equipment using time-based switching which operates through specialized minicomputers and results in, along with a much improved level of activities compared to classical telephone centrals, subscriber and network service that is improved, as is the speed of operation in telecommunications.

The level of development of the production of automation equipment and the experience gained to date in the application of automation to different production sectors are the basic elements that give Romanian industry the opportunities to resolve practically any automation problem in the national economy. In this regard, it is necessary, however, to resolve certain problems, especially with

regards to the in-country production of certain materials that have superior qualities (alloy steels, stressed rolled steel plate, stainless steel or steels resistant to very punishing environments, plastics and specific electro-insulating materials), as well as different high-performance electronic and electrical components. Thus, a combined effort is required in the entire economy to resolve the problems that will ensure the extension of automation and mechanization, using Romanian designs to the highest degree and with high efficiency.

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CSO: 2700/278

LAW ON WORKER SELF-MANAGEMENT IN FOREIGN TRADE AMENDED

Bucharest BULETINUL OFICIAL in Romanian Part 1 No 33, 18 May 81 pp 1-2

[Decree No 115 of the Council of State on Amending and Completion of Law No 12/1980 on Strengthening of Worker Self-Leadership and Economic-Financial and Currency Self-Management in Foreign Trade Activity and International Economic Cooperation]

[Text] The Council of State of the Socialist Republic of Romania decrees:

Article 1. Law No 12/1980 on Strengthening of Worker Self-Leadership and Economic-Financial and Currency Self-Management in Foreign Trade Activity and International Economic Cooperation is amended and completed as follows:

1. Paragraphs 2, 3 and 4 of Article 36 are amended and replaced with the following two paragraphs:

"Exported goods, including those under credit conditions for a period of greater than one year, are paid completely to the production units by the foreign trade enterprises on the basis of customs declaration and other documents which, in accordance with the law, prove the border crossing.

"For deliveries of complex installations, equipment and construction jobs, for which guarantees for good operation are given, the payment is to be made under the conditions shown in the preceding paragraph, less the countervalue of the guarantee which is to be paid following receipt of it from the foreign partner, on the terms and under the conditions provided through the foreign contracts."

2. Articles 36¹-36⁶ are introduced following Article 36 and they are to have the following content:

"Article 36¹. In order to stimulate the production units in launching goods into manufacture and producing them on schedule and under conditions, that is, goods intended for export, they upon request will receive an advance of 10 percent of the value of the goods contracted.

"Advance is given on the basis of firm internal and foreign contracts and orders for the start into production of machinery, equipment, complex installations and other goods.

"The list of products for which advances are given is established by the Ministry of Foreign Trade and International Economic Cooperation and the Ministry of Finance, together with the ministries with foreign trade activity.

"Article 36². The payment for completely finished goods which are prepared for export, built under the conditions and within the schedules established in the domestic and foreign contracts, put into lots, packaged and prepared for shipment, but which could not be exported for reasons independent of the production units, as well as for goods sent from the production units and not yet taxed by customs is made in this way:

"a) Twenty percent upon receipt of the goods at the producer under the conditions and by the organs provided in Article 28, on the basis of reports concluded between the foreign trade enterprises and the production units, checked and confirmed by the organs of the State General Inspectorate for Control of the Quality of Products and by units of the National Bank of the Socialist Republic of Romania or the Bank for Agriculture and the Food Industry, according to the case;

"b) Twenty percent upon shipment of the goods from the production units, on the basis of transport documents;

"c) The difference of 50 and 60 percent, respectively, on the basis of the customs declaration and other documents which, in accordance with the law, prove that the goods have passed the border.

"Article 36³. The 10-percent advance provided in Article 36¹ and the shares provided in Article 36²a) and b) are given monthly in the form of interest-free credits by the units of the National Bank of the Socialist Republic of Romania or the Bank for Agriculture and the Food Industry, according to the case, with the agreement of the foreign trade enterprises which are required to confirm the existence of the foreign contract for the particular goods and the delivery terms for them.

"Article 36⁴. Until complete receipt of the price of the goods produced for export from the foreign trade enterprises, the National Bank of the Socialist Republic of Romania and other banks may give credits to the production units to cover the differences according to the shares provided in Article 36²a) and b), depending on the actual costs, within the limit of those planned, to which, according to the case, are added the packaging expenses and other special export expenses as well as travel expenses up to the border.

"Article 36⁵. The Romania Foreign Trade Bank gives the foreign trade enterprises credits in lei for payment of the goods exported in accordance with Article 36 up to receipt of their countervalue from the foreign partner.

"Upon making the complete payment for the exported goods, after which they have been taxed by customs, the financing banks retain the advances given and the partially paid amounts of the production units.

"Article 36⁶. Production corresponding to the portion of the 10-percent advance belonging to the goods received and shipped, respectively, as well as the amounts received in the shares provided for the receipt and shipment of the goods, is reported by the production units as achievements for production good sold and received and is reflected appropriately in these units' financial results."

DECRETE ON SPARE PARTS, TECHNICAL ASSISTANCE AND EXPORT PRODUCTS

Enactment: BULETINUL OFICIAL in Romanian Part I No 33, 18 May 81 pp 2-11

[Decree No 117 of the Council of State on Providing Spare Parts and Organising Service Activity and Technical Assistance Abroad for Export Products]

[Text] The Council of State of the Socialist Republic of Romania decrees:

Chapter I General Provisions

Article 1. Ministries and other central organs which have under them industrial centrals and production enterprises ... export are required to provide the production and delivery of spare parts and to organize service activity and technical assistance abroad in order to develop and increase the competitiveness of the exports for the entire length of time during which the machinery, equipment, installations and other products exported are in operation.

Article 2. The activity for delivery of the spare parts as well as service and technical assistance abroad are insured as follows:

- a) During the guarantee period for the products exported, this activity is carried out under the conditions established by the export contract;
- b) During the entire length of time during which the machinery, equipment, installations and other products exported are in operation, the sale of spare parts and service and technical assistance activity are carried out on a contractual basis and organized according to the principle of economic-financial and currency self-management;
- c) Upon request by the foreign partners, not connected with the deliveries of Romanian products, on the basis of a technical assistance and service contract, according to the case.

Article 3. The industrial centrals are responsible for the production and delivery of spare parts as well as for the entire activity of service and technical assistance abroad, for the organization of these activities depending on the volume and specific nature of the export as well as for carrying out services provided under conditions of economic efficiency.

Article 4. The foreign trade enterprises which export machinery, equipment, installations and other products, together with the industrial centrals, are required to include clauses in the export contract referring to the delivery of spare parts, to providing for the maintenance and repair of the products and other necessary services, to giving technical assistance both during the guarantee period as well as for the entire length of time during which the products exported are in operation, according to the case. Also they are required to include in the foreign contracts clauses on training the local cadres to operate and maintain the machinery, equipment and installations delivered as well as in connection with the obligations of the foreign partners provide local personnel needed for the operation, maintenance and carrying out of technical assistance and service activity.

Article 5. The Ministry of Foreign Trade and International Economic Cooperation, by negotiation and concluding of agreements and international conventions, provides the appropriate foreign legal framework for the organization and carrying out of activity to sell the spare parts and for service and technical assistance abroad.

Also, the Ministry of Foreign Trade and International Economic Cooperation the way that the activity of technical assistance, service and sale of spare parts abroad is being organized, provision of the material-technical supply and worker personnel needed, supply of spare parts and other resources, on achievement of profitability and the efficiency indicators established and it takes appropriate measures for the continued improvement of this activity.

Chapter II Provision of Spare Parts

Article 6. The industrial centrals and production units are responsible for introducing spare parts into manufacture together with introducing machinery, equipment and export products into manufacture, in accordance with the provisions of the foreign contract.

The spare parts generally are provided prior to delivery of machinery, installations, equipment and other products delivered for export for the entire period during which they are in operation, under the conditions agreed on with the foreign trade enterprises, on the basis of the foreign export contract.

For the guarantee period, the spare parts obligatorily are provided prior to delivery of the product exported or at the latest at the same time as delivery of it.

Article 7. The industrial centrals are required to provide spare parts for export products by delivering them to the foreign partner on the basis of the export contract for the particular products as well as through the stores and warehouses for sale of the spare parts and through the service and technical assistance units established abroad.

Article 8. The industrial centrals and production units provide for the permanent supply of the stores and warehouses for sale of the spare parts as well as the warehouses in the service and technical assistance units with the necessary spare parts, both in quantity and variety, according to the extent to which they get smaller and in conformity with the consumption lists and standards established according to the law and provisions of the foreign contract.

For this purpose the industrial centrals and production units organize central spare parts warehouses in Romania.

The organization of the warehouses and volume of spare parts are established quarterly or monthly, according to the case, by the industrial centrals and production units, together with the foreign trade enterprises.

The central warehouses for spare parts make deliveries of spare parts to the warehouses and stores abroad on the basis of the order of the exporting foreign trade enterprises.

Stocks of spare parts on consignment may be established in the warehouses and stores for spare parts abroad in order to provide for the appropriate operation of the machinery, equipment and products delivered.

Chapter III The Organization of Sales Units for Spare Parts as Well as for Technical Assistance and Service Abroad

Article 9. In order to provide the sale of spare parts as well as services and technical assistance, both during the guarantee period as well as for the entire length of time during which the machinery, equipment, installations and other products exported are in operation, the industrial centrals are required to establish warehouses and stores for the sale of the spare parts as well as service and technical assistance units abroad, depending on the volume and specific nature of the export.

The organization of the sales units for spare parts as well as for service and technical assistance is made by the industrial central through the exporting foreign trade enterprises.

Article 10. The capital needed to carry out activity for delivery of the spare parts, for service and technical assistance abroad during the guarantee period is provided from the amounts included in the foreign price of the products for which these services are provided.

The activity of selling the spare parts, of service and technical assistance for the entire length of time during which the exported products are in operation is organized on the principle of economic-financial and currency self-management so that, along with recovery of the countervalue of the services provided and spare parts delivered, profits are obtained from which all the other expenses are covered and depositing of the largest possible portion is provided for the state budget.

Article 11. The units for sale of the spare parts as well as for service and technical assistance abroad may be organized on their own account or in cooperation with the foreign partners, respecting local legislation and the agreements and conventions concluded with the particular countries.

Article 12. The stores and warehouses for sale of the spare parts are organized for the purpose of marketing them as well as for delivering spare parts during the guarantee period in conformity with the foreign contract.

The service and technical assistance units are organized to carry out the following categories of activities:

- a) Providing materials and spare parts needed to operate and maintain parts during the guarantee and postguarantee terms as well as to recondition parts for their reuse;
- b) Maintaining, supervising the operating conditions, making periodic technical reviews, remedies and repairs during the guarantee and postguarantee terms, doing assembly jobs and putting them into operation;
- c) Effectively solving technical complaints of the foreign partners;
- d) Organizing exhibits, permanent or temporary information, documentation centers or other demonstrations to present the products and make tests and demonstrations;
- e) Presenting to the specialized organs abroad the machinery, equipment, installations and other products requiring authorization in order to put into operation and participating in making the tests to obtain the certificates of attestation for the Romanian products;
- f) Providing specialized services for the foreign firms, in their name and account;
- g) Disseminating technical operations documents, maintaining and repairing the machinery, equipment, installations and other Romanian products delivered and the attached spare parts catalogues, enabling to continually bring them up to date for the beneficiaries in accordance with the improvements and changes made to the products and operating, maintenance and repair techniques;
- h) Organizing the vocational training and guidance for local personnel with a view to the operation, maintenance and repair of the machinery, equipment, installations and other products in accordance with the producers' technical prescriptions;
- i) Following up on the operating behavior of the machinery, equipment, installations and other products, processing data and sending it to the production enterprises with a view to improving quality, redesigning and designing new products with high technical and economic performance;
- j) Marketing the spare parts, tools and instruments specific to the service and maintenance activity and providing services for the machinery, equipment and installations coming from Romania or other origins, upon request of the foreign clients;
- k) Making other commercial operations, including the rental of machinery, equipment and installations and other Romanian products as well as taking any other measures intended to facilitate the selection, acquisition and utilization of the machinery, equipment and installations by the foreign partners.

Article 12. The service and technical assistance units may extend and diversify their activity as the deliveries of machinery, equipment, installations and other products grow by delivering designs and documents and carrying out production jobs.

Article 13. The industrial centrals and foreign trade enterprises are required to take effective measures for the immediate solution of complaints and requests of the foreign partners, respecting the terms and other conditions provided in the foreign contracts and using the service and technical assistance units abroad for this purpose.

Article 13. The units for sale of spare parts as well as for service and technical assistance abroad, under legal conditions, are set up with approval of the Ministry of Foreign Trade and International Economic Cooperation at the proposal of the ministries and other concerned central organs, as advised by the Ministry of Finance and the Ministry of Labor.

The organizational structure, number of personnel as well as material-technical supply are established by the act setting up the unit, depending on the specific nature of the products for which the activity is organized to sell the spare parts, the service and technical assistance activity, the volume of export, the foreign contract provisions and other specific criteria, under conditions of economic efficiency, taking into account the standards applied for similar activities in Romania, also.

In establishing the units it is to be taken into consideration that the activity for sale of spare parts, service and technical assistance abroad should generally be organized for many products within the same group.

In case the sales unit for spare parts as well as for service and technical assistance is organized by association with the foreign partners, the number of personnel, the organizational structure and the material-technical supply are established by the contract closed, depending on the specific nature and value of the unit's activity.

Article 14. The service and technical assistance units are organized as service centers, territorial service points and mobile shops.

A service center may be organized for more than one country, generally adjacent ones, if this measure is justified economically and it may fulfill the job of coordinator of activity for the sales units for spare parts as well as for service and technical assistance in one country or geographic zone, under the conditions established by the act establishing it.

Article 15. Usually, existing spaces and buildings which are rented, bought or placed at the disposal of the foreign partners are used to organize sales activity for spare parts as well as for service and technical assistance abroad on the basis of contracts or, in justified cases, the necessary spaces are built and set up.

Article 16. The industrial centrals are responsible for supplying the service and technical assistance units and the sales units for spare parts abroad with equipment, means of transport, measuring and control apparatuses, technological materials, technical documents, tools, devices and controllers specific to each product as well as spare parts and other necessary products.

If the units provided in the preceding paragraph are organized in collaboration with the foreign partners, the services of the Romanian side are to be offered to design and supply them with necessary machinery, equipment, to provide technical assistance. Also, according to the case, the contribution of the Romanian side to social capital also may be offered.

The volume of activity for sales of spare parts and of service and technical assistance abroad, physical and value-wise, the resources, capital and personnel needed to carry out this activity are provided separately in the plan of the industrial centrals, ministries and other central organs as well as in the commercial balance and plan for receipts and currency payments.

Article 19. The foreign trade enterprises of the foreign level are required to provide for carrying out sales activity for spare parts, service and technical assistance, for which purpose they may organize separate departments or working collectives in the number of positions approved by law, mena which are responsible for fulfilling the duties belonging to the enterprises in this area.

The industrial concerns may organize within the departments for export-import and international economic cooperation, reporting the number of positions established, working collectives or they may establish workers who are responsible for putting the spare parts into production and delivering them as well as for the organization, supply and carrying out of the activity of sales of the spare parts, for service and technical assistance abroad.

Chapter IV. Financing of the Sales Units for Spare Parts as well as Services and Technical Assistance Abroad

Article 20. The sales units for spare parts as well as for service and technical assistance abroad have a budget of incomes and expenses, which, according to the case, will comprise the following:

a) in the "incomes" chapter:

Receipts and profits obtained from the direct sale of spare parts, machinery, equipment, subassemblies, tools, materials and others;

Receipts for spare parts delivered and service jobs done on machinery, equipment and other products during the guarantee period, included in the sales price;

Receipts for spare parts delivered and jobs done outside the guarantee term, in conformity with the contracts signed, including repairs counter cost, as well as other receipts resulting from commercial activity and their own production;

Receipts from service activities, rentals and other services made on the products coming from elsewhere other than from Romania;

Remuneration for certain commercial operations;

Profits obtained by remedial jobs during the guarantee term, not foreseen in normal service activity;

b) in the "expenses" chapter:

Payments for the current flow of activity, such as rents, depreciation charges, taxes, salaries, travel, customs taxes and so forth;

Payments for acquiring certain equipments, parts, materials needed to carry out activity obtained from Romania;

Payments for acquiring from the local market certain strictly necessary materials for carrying out the activity which are not produced in Romania or whose acquisition from the local market is more economical based on calculations.

The budget of income and expenses for the sales units for spare parts as well as for service and technical assistance is an integral part of the budget of income and expenses of the industrial central and is approved by it under conditions of the law.

Article 21. Capital in hard currency and in lei needed to establish, organize and operate the sales units for spare parts as well as for service and technical assistance are provided in the single national plan for social-economic development, in the balance of foreign payments and in the banks' credits plans, with deduction by ministries, other central organs and industrial centrals.

Article 22. The capital in hard currency needed to establish, organize and operate the sales units for spare parts as well as for service and technical assistance are provided by the industrial central by the plan for currency receipts and payments, while the payments are made through the exporting foreign trade enterprise. Under legal conditions, the industrial central may receive credits in lei and in hard currency to complete its own resources.

The fixed resources needed to supply the sales units for spare parts as well as for service and technical assistance, including means of transport, are provided by the industrial centrals from the annual investment capital as approved by the plan.

Article 23. The hard currency capital for doing service jobs abroad and for delivery of spare parts during the guarantee period are recorded separately by the Romanian Foreign Trade Bank in the account of the industrial centrals, corresponding to the share belonging to the guarantee for good operation and reaching of the technical parameters of capacity as provided by the product's foreign price.

In accordance with the law, the industrial central may obtain credits in lei until taking receipt of the guarantee share from the foreign partner in order to complete its own capital, as well as credits in hard currency needed to do the service jobs and delivery of the necessary spare parts.

Article 24. The profits made from sales activity of spare parts, service and technical assistance abroad are transferred to the Socialist Republic of Romania in conformity with the legislation of the particular countries and bilateral understandings.

Depending on need, some reserves in nonconvertible currency may be used to carry out the imports needed for the national economy, to cover some local expenses of the units of Romanian representatives in the particular countries, with regulation of the discounting of those expenses through the Romanian Foreign Trade Bank.

Chapter V Providing Romanian Worker Personnel for the Sales Units for Spare Parts As Well as Services and Technical Assistance Abroad

Article 25. The general leadership of the activity of our own sales units for spare parts as well as for service and technical assistance abroad is provided by Romanian worker personnel; other activities also may be carried out with local personnel, under the guidance of the Romanian specialized worker personnel.

For sales units for spare parts as well as for service and technical assistance abroad organized in collaboration with the foreign partners, the conditions in which

the Romanian worker personnel will carry out their activity as well as the rights due them are established in joint agreement by the contracts concluded.

Article 26. The ministries, other central organs, industrial centrals and production units are responsible for the selection and timely training of the Romanian worker personnel who are to be sent to carry out their activity in the sales units for spare parts, as well as services and technical assistance abroad.

The selection of Romanian personnel is made in conformity with the political-professional criteria established, seeking to send specialists and workers who are solidly trained politically and professionally to the sales units for spare parts as well as for service and technical assistance abroad.

The list of Romanian worker personnel and the program for their training is forwarded to the ministries and other central organs by the industrial centrals 90 days before the time they are to be sent abroad.

In selecting and training the Romanian worker personnel it is to be kept in mind that they should have a solid knowledge of the technical problems connected with the unit's activity as well as those on the commercial activity promoting the Romanian export. The worker personnel selected must possess a driver's licence which is valid for categories E or B vehicle, according to the case, while leadership personnel must be required to know the language of the country where they are carrying out their service activity or a language of international circulation used in the particular country.

Account also is to be taken of the possibilities for employing local personnel when establishing the need for Romanian personnel.

Article 27. The industrial centrals provide separately in the annual plan the number of positions of appropriate qualification in order to provide in time for the number of qualified personnel for the activity of selling the spare parts, and of service and technical assistance abroad, including the Romanian worker personnel needed in the peak periods of activity.

Article 28. An internal Romanian visa for a 4-year period as well as a visa for the particular country and the transit countries are to be provided for the personnel named to carry out their activity in the sales units for spare parts as well as for service and technical assistance, as well as for their families. Sending personnel abroad for jobs of technical assistance, service and sales of spare parts, regardless of length of time, is approved by the leadership of the ministries and other concerned central organs on the basis of the proposals of the industrial centrals or production enterprises as advised by the foreign trade enterprises.

Article 29. As long as they work abroad, the Romanian worker personnel from the sales units for spare parts as well as for service and technical assistance are considered assigned to the foreign trade enterprises.

The foreign trade enterprises are to inform the units in Romania from where the specialists are at least 30 days beforehand of the date of termination of their job abroad.

Article 30. Romanian worker personnel in the sales units for spare parts as well as for service and technical assistance abroad, established on their own account or in association with foreign partners, are paid on the basis of shares of the volume of receipts and profits achieved, under the conditions provided by law.

Chapter VI Final Provisions

Article 31. In case the foreign beneficiary of machinery, equipment and installations from Romania has available his own network of technical assistance and service, appropriately supplied technically and with personnel, the export contract may provide for the technical assistance and service activity to be provided by the foreign partner, with its obligation to be supplied with Romanian spare parts both during the guarantee period as well as after the guarantee period.

Also, it may be agreed that the sale of spare parts can be provided through the foreign partner's commercial units.

Article 32. Failure to carry out the obligations assumed or carrying them out inappropriately through the internal contracts concluded by the foreign trade enterprises with the industrial centrals or with production units for the organization and operation of sales activity for spare parts and for service and technical assistance abroad involve payment of penalties and damages under conditions of the law for the guilty party.

Article 33. Cessation of the activity of the sales units for spare parts as well as for service and technical assistance abroad is made under the conditions provided in the foreign contracts, including in the acts establishing the units with legal personality.

Upon concluding of the contracts and agreement of the constituting acts, the foreign trade enterprises are required to bear in mind that cessation of the activity of the sales units for spare parts as well as for service and technical assistance abroad is to be done following liquidation of the investments and recovery of all expenses made.

Article 34. On the date that this decree goes into effect, Articles 4, 8, 10 and 11 as well as other provisions on the service activity abroad are cancelled from the Council of Ministers Decision No 476/1971 on Organization of Service Activity Abroad and in Romania for Products Produced by Units With a Status of Central, Enterprise, Factory and Plant Which Operate in Them or Under Ministries and Other Central Organs, published in BULETINUL OFICIAL AL REPUBLICII SOCIALISTE ROMANIA, Part I, No 60 of 14 May 1971.

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BRIEFS

ROMANIAN-INDONESIAN AGRICULTURAL AGREEMENT--Bucharest, 3 Jun (ACERPRES)--Angelo Miculescu, Romanian deputy prime minister, minister of agriculture and food industry, and Soedarsono Hadisaputro, minister of agriculture of Indonesia, signed in Bucharest a memorandum of understanding on the development of the cooperation between the two ministries. The actions covenanted particularly aim at the research and evolving of selected seeds, the getting of reproduction material in zootechny, as well as cooperation in wood working. [Text] [Bucharest ACERPRES in English 0920 GMT 3 Jun 81 AU]

NEW OIL TANKER--Bucharest, 13 Jun (ACERPRES)--A new oil-tanker of 150,000 dwt left the Constanta shipyard to be tested before the regular voyages. The ship is endowed with an engine of 28,400 h.p. built in Rasita which develops a commercial speed of 16 knots/hour and has an autonomy of 18,000 miles. The new tanker--named "Libertatea"--is equipped with completely automatized manoeuvre and loading machinery and installations. In the docks of Constanta shipyard a fourth ship of 150,000 dwt is about to be assembled and 5 other ships of 65,000 dwt, as well as ore-carriers and bulk-carriers for export are under construction. This year, Romania's four great shipyards--Constanta, Galati, Mangalia and Braila--will turn out ships for goods transport with a total displacement of 755.2 million dwt, more than 450 of which for foreign partners. [Bucharest ACERPRES in English 0940 GMT 13 Jun 81 AU]

SWISS OFFICIAL VISITS--Bucharest, 26 May (ACERPRES)--On May 26, Cornel Burtica, Romanian deputy prime minister and minister of foreign trade and international economic cooperation, received Raymond Probat, secretary of state, federal foreign affairs apartment of Switzerland, with whom he exchanged opinions on the Romanian-Swiss economic relations. The wish was expressed to further work for identifying new ways and forms of mutually advantageous cooperation in various fields of mutual interest, for expanding bilateral commercial exchanges. [Text] [Bucharest ACERPRES in English 0930 GMT 26 May 81 AU]

ROMANIAN-RWANDA COMMERCIAL AGREEMENT--A long-term commercial agreement was signed today in Bucharest between Romania and Rwanda. The document envisages increases in the volume of commercial exchanges. [Bucharest Domestic Service in Romanian 1500 GMT 29 May 81 AU]

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